UNIVERSITY OF PENNSYLVANIA

A STUDY OF PERSISTENCE OF PUBLIC EVENING HIGH SCHOOL STUDENTS

WALTER B. GREENWOOD

A THESIS

IN EDUCATION

PRESENTED TO THE FACULTY OF THE GRADUATE SCHOOL IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY

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W. B. G.

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I

The Problem and the Reasons for It

The Origin of the Study

For several years it was the privilege of the writer to teach in a public evening high school, which operated under what appeared to be particularly favorable conditions. The school was well administered, and in general the teaching seemed to be good; the social program was commendable; a widely diversified curriculum was offered, made possible by the annual enrollment of more than five thousand students; the school was situated in a thickly populated section of the city and easily accessible; and traditions had been developed through many years of worthwhile service. Moreover the students, as a group, were of desirable type, and on the whole seemed well satisfied with the efforts of the school. Yet every year only a small percentage of these students persisted to the end.

In September when the school opened its doors there was a tremendous influx of prospective students, in fact many were on hand long before the appointed time. This rush continued during the three nights devoted to registration, and many others subsequently sought admission. These registrants were for the most part young people who seemed serious about coming to evening school, and most of them previously had decided upon the subjects which they were going to select. Others consulted with the teachers in charge of the various classes. The group generally seemed to have come with definite objectives and with considerable enthusiasm.

During the first few nights of class work the classrooms were crowded, but a glance at the roll would have indicated that there were some in each group who had not appeared after paying the dollar required for registration. Then as the weeks passed the annual cycle was repeated. There was a constant decrease in attendance, more pronounced during the first two months, quite sharp over the Christmas Holidays, and characterized by a tapering off after that time. A few newcomers were admitted after the holidays, at the beginning of the second term. Finally,

in the last few weeks of the school year, in March, the average attendance might be as low as one-third of the total registration.

This situation seemed serious enough to warrant considerable study, but as a first step it was considered worthwhile to determine the extent of the problem in other evening schools. Some of the results of this investigation are here presented.

Attendance and Elimination of Evening School Students

These figures are for the most part attendance and elimination statistics which have been taken from reports of various cities, and care must be exercised in their interpretation, because of the different methods in use for computing percentage of attendance. Some cities calculate percentage of attendance on the basis of total enrollment, while others drop from the roll those individuals who have ceased to be active, with the result that they are thus able to report considerably higher percentages of attendance.

TABLE I

PATERSON, NEW JERSEY[1]

Number of evenings schools were maintained..... 64–71
Number of weeks schools were maintained..... 19

	MALE	FEMALE	TOTAL
Total enrollment.....	686	642	1328
Average attendance.....	385	377	762

TABLE II

BALTIMORE, MARYLAND[2]

General summary for all evening schools

	WHITE SCHOOLS	COLORED SCHOOLS
Total enrollment.....	10,727	2,862
Net roll.....	4,690	2,211
Average net roll.....	6,870	2,298
Average attendance.....	5,206	1,714

These schools are open from 46 to 99 evenings.

[1] *Annual Report of the Board of Education* (1929), p. 99.
[2] *Report of the Board of School Commissioners* (1928–29), p. 167.

TABLE III

BANGOR, MAINE[3]

The number enrolled in the night school was 405 and of these there was an average attendance of 213. The sessions were of two hours duration on Monday, Tuesday, and Thursday, from October 11 and continued for twenty weeks.

TABLE IV

NEW ORLEANS, LOUISIANA[4]

For all evening schools

	MALE	FEMALE	TOTAL
Total enrollment (white)	2455	1216	3671
Total enrollment (colored)	1202	1119	2321
Attendance (white)	1061	529	1590
Attendance (colored)	601	595	1196

Sessions were held on 78 nights, October 4 to April 22 for white schools and to April 19 for colored.

TABLE V

NEWARK, NEW JERSEY[5]

Total enrollment in evening schools	11,093
Average enrollment	6,694
Average attendance	5,829

TABLE VI

NEW YORK CITY[6]

	ACADEMIC AND COMMERCIAL SUBJECTS			SPECIAL COMMERCIAL SUBJECTS		
	EVENING HIGH	EVENING TRADE	EVENING ELEM.	EVENING HIGH	EVENING TRADE	EVENING ELEM.
No. of schools	18	1	.....	4	3	2
Average register	25,257	446	.....	1,185	686	52
Average attendance	21,290	352	.....	958	546	37

Eighteen evening high schools were maintained for practically the same number of sessions as were the day high schools. Shorter commercial courses were given in four evening high schools, three evening trade schools and two evening elementary schools. In the case of the evening high schools the number of sessions varied from 116 to 159 for the shorter courses.

[3] *Report for School Year* (1926–27), p. 45.

[4] *Annual Report of the New Orleans Public Schools of the Parish of Orleans* (1920–21), p. 79.

[5] *Combined Seventieth and Seventy-first Report of the Board of Education* (1927), p. 170.

[6] *Thirty-first Annual Report of the Superintendent of Schools to the Board of Education—Year Ending July 31, 1929*, pp. 702 and 687.

During the same year there were fifty evening elementary schools open three nights per week for 97 nights. The average register was 31,622 and the average attendance was 20,771.

These figures presented for the public evening schools show an average attendance of about one-half of the total enrollment, which means that toward the close of the year the attendance is much below one-half of the enrollment. Perhaps in most cases it is below one-third. Some writers set the average elimination at two-thirds, from which it follows that the attendance late in the year is less than the remaining one-third. According to Thompson:

"All cities have the same experience with evening schools, in that large enrollments soon shrink to small membership and smaller average attendance. The most favorable figures indicate a retention of membership in evening schools not usually over one-half; the average is less—about one-third."[7]

In a report issued by the Division of School Extension of Philadelphia the following percentages of those original public evening high school registrants who had failed to report after certain dates throughout the school year, were given for the year 1929–30:

TABLE VII

PUBLIC EVENING HIGH SCHOOL ELIMINATION PERCENTAGES—PHILADELPHIA[8]

	ACADEMIC	COMMERCIAL	ENGLISH CITIZENSHIP	HOME ECONOMICS	INDUSTRIAL	PHYSICAL EDUCATION
Sept. 30	12.9	12.4	8.5	8.5	8.3	10.4
Oct. 31	31.4	34.1	22.5	20.4	22.6	22.6
Nov. 30	57.1	55.2	44.2	37.7	42.2	65.9
Dec. 31	66.6	63.8	52.5	46.3	49.0	71.5
Jan. 31	74.6	73.2	61.0	51.8	56.7	94.1
Feb. 28	80.0	80.0	68.9	57.1	63.4	94.1

Note: These figures are cumulative.

That the statistics presented for Philadelphia are probably typical of other cities is indicated by the following from Evans:

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[7] Thompson, Frank V., *Schooling of the Immigrant*, pp. 67–68.
[8] Report of Division of School Extension (1930), unpublished.

"In evening schools the heavy drop-out in the first weeks of the term is illustrated by the figures for Buffalo at the end of the ninth week, November 12, 1924. The 24 elementary schools reporting had lost 26 per cent of their registration; a citizenship group of about 300 had lost 35 per cent, three high schools 26 per cent, and four men's vocational schools 30 per cent. The total registration of about 23,000 had lost 27 per cent. Meantime on remaining registration the percentage of attendance for the week was 83 per cent for the elementary, 85 per cent for the citizenship, and 79 per cent for the vocational schools."[9]

Probably enough evidence has been furnished to indicate the seriousness of the problem of elimination and irregularity of attendance in the education of workers. In public evening high schools of large cities it seems fair to set the average attendance for the school year at about one-half of the total enrollment, and the elimination at not less than two-thirds of the total enrollment. But from the standpoint of class instruction this situation is even more critical, because if fifty per cent of the students are actually present on each of two given evenings the probability is that they will not be the same fifty per cent. It appears to be obvious that under such conditions the public evening school must necessarily fall far short in its efforts to render the service for which it is organized; and this is particularly significant in the light of the increasing emphasis which is being placed upon the education of those who have discontinued day school, and the importance of the public evening school in this activity.

The study which is here presented grew out of a desire to discover facts which might contribute in some small way toward a reduction of elimination in the public evening school. It followed the line of reasoning provoked by the following questions.

Questions Considered in the Study

1. What are some of the significant facts about public evening high school students—facts that would seem likely to have a bearing upon persistence?
2. What relationships exist between these facts and persistence?

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[9] Evans, Owen D., *Educational Opportunities for Young Workers*, p. 145.

3. How is absence related to elimination?
4. What appear to be the most prominent reasons for dropping out of the public evening high school?

The attempt to obtain answers to these questions, consistent with the facilities at hand, determined the course of this investigation.

Outline of the Study

1. A survey of the student population of certain public evening high schools.
2. A comparison of the group of students who persisted throughout the year with those who dropped out, on the basis of facts obtained in the survey.
3. A study of the relationship between absence and elimination, viz., the mathematical probability of a return to school after any given number of consecutive absences.
4. A presentation and consideration of the reasons given by students for dropping out—also reasons given by other members of their families.

II

The Method, Materials and Personnel Employed in This Investigation

Procedure

In 1929 the public evening high schools of Philadelphia opened for registration on September 16, and classes started on September 18. On November 19 a questionnaire was given to the entire student body in attendance at four of these schools: Frankford, Jules Mastbaum, South Philadelphia, and West Philadelphia. The purpose of this was to gain information which might later be found to have bearing upon elimination. There were 3813 students involved. The decision to defer the administration of the questionnaire until November was dependent upon the following: the reactions of the students obtained at that time would probably be more worthwhile than if secured at the opening of the school year; classes would be more stabilized and control easier to exercise; an investigation of elimination figures of the previous year indicated an almost equal division between those who had continued to the end of the year and those who had dropped out after about the middle of November.

Lists of the members of each class who had filled out these questionnaires were then prepared, and on March 19, 1930, these lists were submitted to the various teachers concerned, with directions that they note beside each name, the date on which that individual last attended class. For those who had discontinued the teachers were to add the reasons for discontinuance, if known. This date was selected because it was as late in the school year as it was possible to go with safety; for although the sessions ended two weeks after that time it seemed wise not to submit the lists to the teachers any later, because of the extra work which always accompanies the closing of the year.

The roll books of the classes were then examined in order to secure a criterion for elimination, to make a more detailed study of habits of attendance, and to serve as a check on the returns furnished by the teachers. On the basis of these returns and of

the examination of the roll books the students were separated into two groups: those who had dropped out prior to March 12, 1930, who will hereafter be termed drop-outs; and those who had persisted to the end of the year, who throughout this study will be designated as stay-ins.

After the separation of the students into the two groups, these groups were contrasted from the standpoint of the information supplied on the questionnaire.

A separate study involving intelligence and elimination was then made by going back to the day school records of a group homogeneous as to age.

For the purpose of securing a check on the reliability of the information furnished on the questionnaire, and also to determine reasons for elimination, 410 of the students were interviewed at their homes, and in 100 additional cases relatives and friends of the students were interviewed. Of those interviewed 286 were students who had discontinued from the evening school.

Each of these steps will be considered in detail in subsequent chapters.

Selection of City

The study was conducted in Philadelphia for the following reasons:

1. Philadelphia had a varied and progressive system of public evening high schools, sufficient in number to permit adequate selection of schools within the system. In population it was the third largest city in the United States, with a considerable percentage of foreign born. Within its limits were to be found a great variety of manufacturing and commercial interests. Its geographical area made it possible to study the effect of distance from the school, and also the effect of different means of transportation to and from school. It was felt also that the relative stability of the population would be helpful in any follow-up work which would be necessary.

2. It was possible to secure from those in control of the public evening schools of Philadelphia a degree of active cooperation without which an investigation of this type would have been impossible.

3. The writer was familiar with the evening and day schools of Philadelphia, and with the city itself.

The Evening Schools of Philadelphia

During the academic year 1929–30 there were fourteen public evening high schools in operation in Philadelphia. Eleven of these conducted sessions on Monday, Tuesday, and Wednesday evenings of each week, while the other three were open five evenings per week, although the same groups of students did not attend all five nights. One of the schools was a trade school for women.

These schools differed from each other more or less in subjects offered and in type of pupil personnel, but in organization and general regulations they were, with one exception, about the same. This exception was the Central Standard Evening High School where the work was organized as in the day high schools, and where a diploma was awarded which was recognized as the equivalent of that given in the day schools.

The following regulations concerning evening high schools have been taken from the catalogue issued by the Division of School Extension of Philadelphia:

CALENDAR FOR SCHOOL YEAR 1929–30

First Term (13 weeks). September 16, 1929, to December 14, 1929 incl.
Second Term (13 weeks). January 6, 1930 to April 5, 1930, incl.
Sessions are held 7:30 P. M. to 9:30 P. M.

Registration. September 16, 17, and 18 are for registration and classification of pupils. No pupils will be admitted for the first term after Monday, September 30th.

Deposit. A deposit of one dollar ($1.00) is required of all students. This deposit will be returned only at the close of the school year to those who have attended seventy-five per cent (75%) of the sessions for which they were enrolled. In Industrial and Technical courses a laboratory or material charge of $2.00 is made. This is not returnable.

Organization of Classes. Classes will be organized only if the number of pupils registered for any subject warrants the establishment of a class in that subject.

Changes of Courses. Students should exercise the greatest care in selecting the subject they wish to pursue, as changes from one course to another will be permitted only for exceptionally good reasons.

Discontinuance of Classes. Any of the classes organized in a school may be discontinued if the attendance decreases to a point where the continuance of the class is not justified.

Attendance. Regular attendance is required. Students must attend at least seventy-five per cent (75%) of the hours of any course in order to receive credit for the work.

Prompt attendance is essential. Lateness interferes with the unity and effectiveness of class work and can only be excused when unavoidable. The doors are open at 7 P. M., and rooms are provided in which students may study or read.

Supplies. Paper, drawing boards, T-squares and shop tools and materials are furnished by the schools. Students supply necessary textbooks, drawing instruments, pencils, notebooks and other needed articles."[1]

The Standard Course offered at Central Evening High School was conducted on a somewhat different schedule from that given above, but the differences are not significant for our purpose. The following is also taken from the aforementioned catalogue:

Certificate of Proficiency

"Credits. A one-hour subject successfully completed entitles the student to three credits for each term, or six credits for the year; a two-hour subject to six credits for each term, or twelve credits for the year.

Certificates. At the close of the year the students are given a card record certifying by subjects as to the number of credits earned. The completion of a definite course of three or more years in any subject or department entitles the student to a certificate of proficiency in that subject.

Diplomas. The Central Evening High School, Broad and Green Streets, offers a standard evening high school course, accredited by the Pennsylvania State Department of Public Instruction. Graduates of the standard evening high school will receive a diploma entitling the holder to the same privileges as are extended to graduates of day high schools.

Students who have had one or more years of work in the day high schools and who enroll for the Standard Course are given credit for the work previously completed.

Students who intend to enter professional or technical schools that require graduation from high school as a prerequisite for admission, or who, for any other reason desire the diploma, are advised to enroll in the Central Evening High School."[2]

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[1] *Evening High Schools, Outline of Courses*, p. 2.
[2] *Evening High Schools, op. cit.*, p. 15.

Following is a list of the subjects offered in one or more of the public evening high schools of Philadelphia in 1929–30:

English and Citizenship—1st, 2nd, and 3rd years
Lip Reading—1st year
Speech Improvement—1st year
English—1st, 2nd, 3rd, 4th, and 5th years
Business English—1st and 2nd years
Library Science—1st year
French—1st and 2nd years
German—1st and 2nd years
Italian—1st year
Latin—1st year
Spanish—1st and 2nd years
United States History—1st year
Current History—1st year
Arithmetic—1st and 2nd years
Algebra—1st and 2nd years
Plane Geometry—1st and 2nd years
Trigonometry—1st year
Applied Mathematics
Strength of Materials
Elementary Analysis
Chemistry—1st, 2nd and 3rd years
Physics—1st and 2nd years
Choral
Shorthand and Typewriting—1st, 2nd and 3rd years
Typewriting—1st, 2nd and 3rd years
Preparatory Course for Bookkeeping
Bookkeeping—1st, 2nd and 3rd years
Bookkeeping and Typewriting
Commercial Correspondence and Typewriting
Filing
Machine Calculating
General Office Practice—1st and 2nd years
Salesmanship
Business Law
Advertising
Art—1st, 2nd, and 3rd years
Mechanical Drawing—1st, 2nd, and 3rd years
Architectural Drawing—1st, 2nd, and 3rd years
Commercial Art—1st, 2nd, and 3rd years
Automobile Mechanics
Blue Print Reading
Bricklaying
Cabinet Making—1st and 2nd years
Carpentry—1st, 2nd, and 3rd years
Electricity
Electric Wiring
Electrical Construction—1st, 2nd, and 3rd years
Electro Plating
Industrial Accounting
Machine Construction—1st, 2nd, and 3rd years
Printing—1st, 2nd, and 3rd years
Paperhanging
Plastering
Plumbing—1st, 2nd, 3rd and 4th years
Power Plant Engineering
Sheet Metal Work—1st, 2nd, and 3rd years
Textile Working Design
Textile Chemistry
Textile Mathematics
Fabric Analysis
General Textiles—1st and 2nd years
Hosiery Knitting
Basketry

Various Clothing Classes	Foods and Cooking
Millinery and Novelty Work	Physical Training[3]

These subjects are grouped by the Division of School Extension under the general headings: Industrial, Physical Education, Home Economics, English and Citizenship, Academic, Commercial, and Miscellaneous. This grouping will be maintained throughout the study, but the last named group contained only a few special classes in the entire city and has no representation here.

Selection of Schools

Owing to the limited facilities at hand, and the desire to keep the investigation under control, it was decided to limit the study to a cross-section of the public evening high schools of Philadelphia. Accordingly, of the fourteen available schools, four were selected which seemed to furnish a fairly accurate picture for the city as a whole. The factors considered in this choice were: geographical location of school; sex, nationality and social status of the student body; size of school; character of curricula being offered.

The Frankford Evening High School was a relatively small school offering a well-balanced program of studies. The immediate neighborhood was upper middle class residential, but the school drew from probably the greatest area of any of the public evening high schools; an area extending from a manufacturing section at one end, to a rural section at the other. In the main, however, it was suburban. The sexes were about equally represented. The population was mostly native born, but with a sprinkling of foreign born, mostly Polish and German.

The Jules Mastbaum Vocational School emphasized industrial courses. Its population was predominately male and native born, most of the few foreign born being Polish. It was situated in the mill section of the city and for the most part its students came from a thickly populated area in the immediate neighborhood of the school. But, owing to the great variety of industrial

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[3] *Evening High Schools, op. cit.*, pp. 3–14.

courses which it offered, and which were not given in other public evening high schools, it attracted some students from considerable distances. It also registered many students from the Frankford area because transportation to and from it was better than that to and from the Frankford High School. In number of students it was a bit larger than Frankford.

The South Philadelphia Evening High School was next to the largest in the city. Also, with the exception of the Central Standard Evening High School it offered the most complete academic curriculum of any of the public evening high schools. The sexes were about equally represented. The population was largely of foreign parentage, mostly Italian, but with a fair percentage of Russians. In spite of the size of the school population, which was almost twice that of Frankford, the students came from a very limited but thickly populated area.

The West Philadelphia Evening High School was of about the same number of students as the Mastbaum School. It emphasized commercial subjects and had a predominance of females. With the exception of the Standard Evening High School the educational background of its student body probably ranked the highest of any of the public evening high school groups. It drew from a relatively large residential area, in which were many apartment houses of good type. A considerable number of colored students attended the school.

That these schools represent a fair selection on the basis of attendance and elimination is indicated by the attendance figures given in Table VIII, for eleven of the public evening high schools of Philadelphia during the year 1929–1930. The first four schools are those used in this study.

TABLE VIII

ATTENDANCE FIGURES FOR PUBLIC EVENING HIGH SCHOOLS OF PHILADELPHIA

SCHOOL	PERCENTAGE OF ATTENDANCE
1	42.6
2	50.2
3	49.1
4	45.9
5	56.6
6	42.9
7	46.4
8	51.0
9	49.2
10	46.6
11	46.8

III

The Questionnaire and Its Construction

The purposes of the questionnaire were threefold:

1. To obtain a picture of the evening school population in terms of facts which might bear upon elimination and irregularity of attendance;
2. To use this information as a basis for comparison between the group of drop-outs and the group of stay-ins, with the chance that significant differences might be disclosed;
3. To determine certain emotional reactions of the students to the work of the school.

With these purposes in mind the first step in the construction of the questionnaire was to list, as completely as possible, what seemed to be the most prominent reasons for discontinuance. This list was subjective but represented the combined judgment of several persons engaged in night school work. Among the reasons mentioned were: (1) work, (2) lack of encouragement by employer, (3) just not interested, (4) too much interested in outside affairs, (5) improper classification at beginning of term, (6) course not suited to purpose of individual, (7) distance from school, (8) quit because friend quit. As far as practicable questions were designed to cover these possible reasons for elimination. The questionnaire was then submitted to the criticism of the members of a seminar group.

Before using it in this study the questionnaire was given to 134 public evening high school students and in the light of their reaction to it, and the answers which they gave, certain other corrections were made. The questionnaire in its final printed form is reproduced on the following page.

DIVISION OF SCHOOL EXTENSION

Seventeenth and Pine Streets, Philadelphia

(1) Name.....
(2) Address.....
(3) Age..... (4) *Male* *Female*
(5) *White* *Colored* (6) *Married* *Single*
(7) In what country were you born?.....
(8) If not born in the United States, at what age did you enter?.....
(9) Do you have trouble understanding English? *Yes* *No*
(10) How do you usually come to school?
Trolley *Bus* *Automobile* *Walking* *Elevated*
(11) How many minutes does it usually take you to get to school?.....
(12) What is your daily occupation?.....
(13) At what hours do you start and stop work each day?.....
(14) Do you expect that your work will cause you to be absent from school any evenings later on? *Yes* *No*
(15) At what age did you leave day school?.....
(16) What was the last grade you completed in day school?.....
(17) Why did you leave day school?

Disliked day school *Couldn't afford to continue* (financial)
Wanted to work *Didn't get along in day school*
Couldn't see the value of any more day school work.

(Insert any other reason)

.....

(18) Before this year how many years have you completed in evening school?
..... (a) Where.....
(19) Have you ever dropped out of evening school anywhere before?
Yes *No*
(a) If so, why did you drop out?.....

(20) Why are you attending evening school now?
Health *Improve my education* *Advancement at work*
For credit *Pleasure* *To learn a trade or job*
To learn something useful in everyday life.

(Insert any other reason)

.....

(21) What subjects are you now taking?.....
(22) Do you think that these subjects are the proper ones for your purpose?
Yes *No* *I don't know*

(23) What caused you to select these subjects?
I selected them *A teacher or principal advised me*
Somebody outside advised me

(24) Do you plan to continue evening school work next year?
Yes *No* *Undecided*
(a) If so, where?.....

(25) Do you find the evening school work
Too difficult *Difficult but not too difficult*
Too easy *Easy but not too easy*

(26) Does your employer know that you are attending evening school?
Yes *No* *I don't know*
(a) If so, does he encourage you to attend? *Yes* *No*
(b) Does he discourage you? *Yes* *No*

(27) What first suggested evening school to you?
Posters *Newspapers* *Somebody in the family*
A friend *A teacher in my day school* *My employer*
(Insert any other)
.....

(28) Do you desire home work to do over the week-ends? *Yes* *No*
(29) Do you desire tests on the work as you go along? *Yes* *No*
(30) If you have been absent any evenings this term give the reason or reasons.
Personal illness *Illness in the family*
Bad weather *Social engagement* *Too tired*
Felt like taking a night off *Working overtime*
(Insert any other reason)
.....

(31) What do you like most about the way in which the evening school is conducted?.....
.....
.....

(32) What would you suggest to improve the eveningschool?.....
.....
.....

Date..... School.....

It will be noted that wherever possible answers have been suggested. This was done for the following reasons:

1. The response is more likely to be tuned to the purpose of the question, thereby eliminating a number of irrelevant answers;

2. The information secured in this way can be more accurately classified;
3. In some cases the suggested answer is an aid to the memory of the one filling out the questionnaire;
4. The answering of the questions is expedited;
5. The reduction of fatigue induces a more favorable reaction on the part of the individual;
6. Information thus obtained can be more definitely checked by interview.

There are, however, dangers which accompany this practice.

1. There is the possibility that in thus attempting to keep the response relevant to the purpose of the question the thinking of the student is being controlled in a manner which inhibits an accurate answer. This is apt to happen when the response which the student has in mind has not been included in the list. To overcome this the suggestion was made on the questionnaire that the student write in any answer not listed, and space was provided for this purpose.
2. Sometimes certain responses are favored by their position, or by spacing. The only remedy for this is to be careful to give equal legibility to the answers, and to see that none of them has a position of undue prominence or obscurity, as far as this is possible.
3. It might happen that the person who is not answering the questions conscientiously will underline any suggested answer at random. This was checked in the interviews and found to be practically non-existent in this investigation.

It seemed that the advantages accompanying the use of suggested answers outweighed the disadvantages. Furthermore the writer was influenced by the fact that in the few studies of similar nature which had come to his notice, suggested answers had not been used. In one of these, a study which was made in Philadelphia in 1928 by the Division of School Extension, the responses to some questions were so ambiguous and poorly tuned to the purpose of the question that classification seemed impossible.

Administration

On November 19, 1929, the questionnaire was submitted in the four schools previously mentioned. Each classroom teacher was at the same time furnished with a large envelope, and a sheet of

instructions which is reproduced below. The purpose of this sheet was not only to disseminate information to the teachers but also to induce a favorable reaction from them and the pupils.

THE BOARD OF PUBLIC EDUCATION

Department of Superintendence

Division of School Extension

November 15, 1929.

To Teachers in Evening High Schools:

Last year a questionnaire was given to your classes from which some valuable and interesting information has been gathered. In order to check up and confirm some inferences drawn from the material, and in order that we may follow up pupils who drop out of school after the questionnaire is given to determine, if we can, causes of leaving school, it has been found necessary to repeat the questionnaire this year in a number of schools in different sections of the city. The questionnaire will be given in your school Tuesday evening, November 19th, if the weather is clear, otherwise on Wednesday, November 20th.

Will you present this matter to your group in an understanding and sympathetic way that the replies may be worthwhile.

William Henry Welsh,
Director.

* * * * * *

CLASSROOM PROCEDURE

After passing out the questionnaire, the teacher will please READ THE FOLLOWING TO THE CLASS:

"We realize that you are attending evening school for a definite purpose and often at considerable sacrifice. Recognizing this, we want you to feel that it is our earnest desire to help you in every way possible, and it is for this reason that we are seeking information from you which we can obtain in no other way.

Therefore, will you please answer the questions which you have received frankly and carefully. Nothing which you say will be interpreted as a criticism of the school, the teacher, or anyone connected with yourself, and nobody in the school or connected with yourself will see the papers. AFTER THE PAPERS HAVE BEEN COLLECTED THE TEACHER WILL PLACE THEM IN AN ENVELOPE AND SEAL IT.

You may use pen or pencil in answering the questions.

If you do not have sufficient room for certain answers, write the number of the question on the other side of the paper and continue the answer there.

If anything is not clear ask the teacher."

* * * * * *

INFORMATION FOR THE TEACHER

On the envelope in which you place the questionnaires please write: (1) YOUR NAME, (2) SCHOOL, (3) SUBJECT, and (4) THE APPROXIMATE NUMBER OF MINUTES CONSUMED BY THE CLASS IN ANSWERING THE QUESTIONNAIRE.

Follow-up Lists to Teachers

The form reproduced below was used for the purpose of obtaining a final report on elimination from the teachers. Under the printed material were listed the names of the members of the class who had filled out questionnaires, a separate list being compiled for each class represented in the study. The form is self-explanatory.

THE BOARD OF PUBLIC EDUCATION
Department of Superintendence
Division of School Extension

March 17, 1930.

To Teachers in the Evening High Schools:

Following is a list of members of your class who answered a questionnaire for this office on November 19, 1929. It is now my desire to secure additional information from those who have dropped out since that time. Therefore on Wednesday, MARCH 19, will you please write beside each name the DATE ON WHICH THAT INDIVIDUAL LAST ATTENDED YOUR CLASS, and for those who have discontinued add any information which you might have as to WHY THEY DROPPED OUT. The names are subject to errors, so in some cases the address has been included for better identification.

I wish to take this opportunity to thank you for your effective cooperation in the administration of the above mentioned questionnaire.

William Henry Welsh,
Director.

These returns furnished information, on the basis of which the students were subdivided into stay-ins and drop-outs.

In addition the roll slips of each class were collected and examined, each slip containing the attendance record of a student. The reasons for this examination were:

1. It was necessary to determine scientifically the criterion which would serve to distinguish between stay-ins and drop-outs; or putting it differently, to obtain a definition for a drop-out.
2. It furnished a check on the returns of the teachers and cleared some doubtful cases.
3. It enabled the investigator to trace some of those students who had been reported by the teachers merely as having transferred to other classes.

Incidentally the information furnished by the teachers relative to student attendance was found to be in almost perfect agreement with that on the roll slips. In all there were 52 transferred students, whose records could not be determined with sufficient certainty to warrant their classification as stay-ins or drop-outs.

IV

Relationship Between Absence and Elimination and Determination of Drop-Outs

Absence and elimination are so related that a study of either of them immediately involves the other. Consequently a consideration of habits of attendance has been introduced here for the following specific reasons:

1. Before comparing drop-outs with stay-ins one must first decide upon a basis for separation of the two groups. In Chapter II it was stated that those who had not attended school subsequent to March 12 would be classified as drop-outs, viz., those who had been absent the last three weeks (nine nights) of the school year.[1] This date was arbitrarily chosen and it seemed necessary either to secure confirmation of its adequacy, or select another time.

2. In many cities it is the practice to drop from the evening school rolls those who have not been present for a certain number of evenings. A study of attendance habits would probably be of use in determining the number of absences necessary for such action.

3. Usually when a student drops out of evening school some effort is made either by the school or teacher to have him return. A knowledge of the extent to which absence is related to elimination should aid in any such follow-up work.

4. A study of attendance habits might be used to measure the efficiency of different methods of getting prospective drop-outs back into step.

5. Figures showing the relationship between absence and elimination at different periods of the school year indicate when the greatest effort should be made to prevent absence.

As a basis for this special study, the attendance habits of 400 individuals were investigated. The roll books of the classes

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[1] It should be noted at this point that the attendance figures for the last two nights of the school year are not dependable because regular classes are not held on those evenings.

were used for this purpose and selection was made by taking every tenth registrant consecutively. Consequently many of these were students who had not filled out questionnaires. Three of the four schools included in this thesis were studied in this way, and since the results in each case were almost exactly the same, as can be seen in Tables XI to XVII, it was deemed unnecessary to investigate the other school. The three schools considered were the Mastbaum, South Philadelphia, and West Philadelphia Evening High Schools. Only those students were included who were in classes which met three evenings per week.

A preliminary examination of the attendance records showed that the habits of attendance were different for different periods of the evening school year. Thus, for example, the tendency in the first two months is to attend regularly until the point of actual elimination, but toward the close of the year there is a tapering off, characterized by more irregularity of attendance but less actual elimination. Therefore, the evening school year was subdivided as follows:

1. September and October,
2. November and December,
3. January, February, and March.

When absence persisted from one of these three periods into the next it was considered as having taken place in that period in which the major portion of it occurred. Thus, if a student was absent the last two evenings in October and the first three evenings in November the absence was recorded as of the second period.

The results are given in Tables XI to XVII inclusive, but Tables IX and X have been inserted in order to clarify the meaning of the others. These demonstrate progressive steps in the compilation of Table XI, and in similar fashion Tables XII to XVII have been developed. In Tables IX and X the month of March was considered separately from January and February, but it seemed more significant to combine these in the other tables because of the insufficiency of the data for March, due to the fact that it was near the end of the school year.

TABLE IX

DEMONSTRATION

CONSECUTIVE ABSENCES	SEPT.-OCT. ABSENCES WITH RETURN	DROP OUTS	NOV.-DEC. ABSENCES WITH RETURN	DROP OUTS	JAN.-FEB. ABSENCES WITH RETURN	DROP OUTS	MARCH ABSENCES WITH RETURN	DROP OUTS
1	99	43	104	16	93	16	31	3
2	40	..	29	..	22	..	12	..
3	16	..	8	..	4	..	2	..
4	7	..	7	..	4	..	2	..
5	0	..	3	..	4	..	0	..
6	0	..	0	..	3	..	1	..
7	0	..	1	..	0	..	0	..
8	0	..	0	..	1	..	1	..
9	0	..	0	..	1	..	0	..
10	0	..	1	..	0	..	0	..
11	0	..	0	..	0	..	0	..
12 or over	1	..	3	..	0	..	0	..
Total	163							

The roll slips showed that in September and October there were 99 cases of single absences for this particular group, after which the individual returned to class. Similarly there were 40 cases of double consecutive absences, 16 of triple consecutive absences, etc., in the same period, after each of which the student returned to class. During that same period there were also 43 cases of actual elimination, as determined by the fact that those individuals did not return to school at all. Since each double absence included also a single absence, and each triple absence also included a double and single absence, etc., and moreover since each drop-out should be included as a single absence, double absence, triple absence, etc., it was necessary to add 43 to the total of the second column of Table IX in order to obtain the figure 206 found in the second column of Table X. Then 99 is subtracted from 206 to produce the 107 found immediately below 206. By taking 40 from 107 the next figure, 67, is secured. In similar fashion the remainder of Table X has been compiled.

TABLE X

DEMONSTRATION

CONSECUTIVE ABSENCES	SEPT.-OCT. CASES	DROP OUTS	NOV.-DEC. CASES	DROP OUTS	JAN.-FEB. CASES	DROP OUTS	MARCH CASES	DROP OUTS
1	206	43	172	16	148	16	52	3
2	107	..	68	..	55	..	21	..
3	67	..	39	..	33	..	9	..
4	51	..	31	..	29	..	7	..
5	44	..	24	..	25	..	5	..
6	44	..	21	..	21	..	5	..
7	44	..	21	..	18	..	4	..
8	44	..	20	..	18	..	4	..
9 or more	44	..	20	..	17	..	3	..

As one descends Column 2 of Table X it is noted that of a total of 206 cases in which the individual was absent for one or more evenings consecutively, a total of 43, or 21 per cent, failed to return. Similarly of the 107 cases of absence of two or more consecutive evenings the same number 43, or 40 per cent, did not return. Opposite three or more consecutive absences the 43 out of 67 means an elimination of 64 per cent. Thus we can conclude that when one of these students has been absent for three consecutive evenings during the first two months of the evening school year, the chances are approximately two out of three, or two to one that that individual will not return. In Tables XI to XVII the point has been indicated by an asterisk, where the elimination exceeds 50 per cent, or after which the individual might be more properly classified as a drop-out.

TABLE XI

ATTENDANCE HABITS

West Philadelphia Evening High School—Female

CONSECUTIVE ABSENCES	SEPT.-OCT. CASES	DROP OUTS	NOV.-DEC. CASES	DROP OUTS	JAN.-FEB.-MAR. CASES	DROP OUTS
1	206	43	172	16	200	19
2	107	..	68	..	76	..
3	*67	..	39	..	42	..
4	51	..	*31	..	*36	..
5	44	..	24	..	30	..
6	44	..	21	..	26	..
7	44	..	21	..	22	..
8	44	..	20	..	22	..

TABLE XII

ATTENDANCE HABITS

West Philadelphia Evening High School—Male

CONSECUTIVE ABSENCES	SEPT.-OCT. CASES	DROP OUTS	NOV.-DEC. CASES	DROP OUTS	JAN.-FEB.-MAR. CASES	DROP OUTS
1	167	25	162	26	149	11
2	68	..	78	..	49	..
3	*42	..	55	..	32	..
4	33	..	*42	..	22	..
5	30	..	38	..	*19	..
6	28	..	37	..	17	..
7	27	..	32	..	15	..
8	26	..	30	..	14	..

TABLE XIII

ATTENDANCE HABITS

Mastbaum Evening High School—Female

CONSECUTIVE ABSENCES.	SEPT.-OCT. CASES	DROP OUTS	NOV.-DEC. CASES	DROP OUTS	JAN.-FEB.-MAR. CASES	DROP OUTS
1	92	9	102	17	80	6
2	31	..	53	..	33	..
3	*15	..	*33	..	20	..
4	13	..	28	..	15	..
5	11	..	21	..	12	..
6	10	..	21	..	*11	..
7	9	..	20	..	9	..
8	9	..	19	..	9	..

TABLE XIV

ATTENDANCE HABITS

Mastbaum Evening High School—Male

CONSECUTIVE ABSENCES	SEPT.-OCT. CASES	DROP OUTS	NOV.-DEC. CASES	DROP OUTS	JAN.-FEB.-MAR. CASES	DROP OUTS
1	138	29	141	23	168	7
2	*56	..	73	..	51	..
3	38	..	*41	..	31	..
4	36	..	35	..	27	..
5	35	..	31	..	20	..
6	34	..	29	..	19	..
7	31	..	24	..	16	..
8	30	..	24	..	*13	..

TABLE XV

ATTENDANCE HABITS

South Philadelphia Evening High School—Female

CONSECUTIVE ABSENCES	SEPT.-OCT. CASES	DROP OUTS	NOV. DEC. CASES	DROP OUTS	JAN.-FEB.-MAR. CASES	DROP OUTS
1	240	29	237	26	261	19
2	91	..	92	..	96	..
3	*54	..	63	..	53	..
4	42	..	*44	..	38	..
5	37	..	40	..	*29	..
6	32	..	36	..	27	..
7	31	..	35	..	25	..
8	31	..	32	..	22	..

TABLE XVI

ATTENDANCE HABITS

South Philadelphia Evening High School—Male

CONSECUTIVE ABSENCES	SEPT.-OCT. CASES	DROP OUTS	NOV.-DEC. CASES	DROP OUTS	JAN.-FEB.-MAR. CASES	DROP OUTS
1	322	50	269	45	301	21
2	149	..	124	..	102	..
3	*93	..	*84	..	66	..
4	70	..	66	..	*41	..
5	65	..	61	..	34	..
6	58	..	58	..	28	..
7	55	..	55	..	25	..
8	53	..	52	..	23	..

TABLE XVII

SUMMARY OF ATTENDANCE HABITS

(Compiled from Tables XI to XVI

CONSECUTIVE ABSENCES	SEPT.-OCT. CASES	DROP OUTS	PER CENT	NOV.-DEC. CASES	DROP OUTS	PER CENT	JAN.-FEB.-MAR. CASES	DROP OUTS	PER CENT
1.....	1,165	185	16	1,073	153	14	1,159	83	7
2.....	402	..	46	488	..	31	407	..	20
3.....	*309	..	60	315	..	49	244	..	34
4.....	245	..	76	*246	..	62	179	..	46
5.....	222	..	83	215	..	71	*144	..	58
6.....	206	..	90	202	..	76	128	..	65
7.....	197	..	94	187	..	82	112	..	74
8.....	193	..	96	177	..	86	103	..	81

On the basis of the information furnished by Table XVII, the reliability of which is attested by the uniformity of the results in Tables XI to XVI, it was considered safe to classify as drop-outs those students who had not been present subsequent to March 12. This was somewhat in excess of the number of consecutive absences necessary to indicate a probability of elimination of more than fifty per cent, and seemed particularly appropriate as a criterion, because this date marked the end of an evening school week.

Table XVII presents interesting and apparently significant data. Thus out of 1165 cases of single absence in September-October, 185 fail to return thereafter, or approximately one out of every six. When the absence extends over two consecutive evenings the probability of elimination is 46 per cent, and for three evenings it increases to 60 per cent. As the school year advances these probability percentages decrease. For example, a single absence in November-December carries an elimination probability of 14 per cent, and in January-February-March this drops to 7 per cent. In these last three months it requires five consecutive absences to cause the number who drop out to exceed the number who return to school.

In the first two months of the school year any effort on the part of the school or the teacher to have absentees return might best be made after the second consecutive absence, because almost half of these individuals are definitely headed for elimination. Since the elimination probability of a single absence is only 16 per cent it would hardly be worth the trouble to follow up each of these.

V

A Study of 3813 Public Evening High School Students on The Basis of Possible Factors in Elimination—Material Obtained by Questionnaire

Age Distribution

Tables XVIII, XIX, and XX and Fig. 1 are devoted to the age distribution of the 3813 public evening high school students who filled out the questionnaire. These have been separated according to sex and course. Since a representative group of schools were selected, it is probable that a similar age distribution would be found throughout the public evening high schools of the entire City of Philadelphia. Owing to the fact that the compulsory age limit for day school pupils in Philadelphia is 16, this age has been set as the minimum for evening school registration, because it is felt that a student cannot do justice to both day and evening school at the same time. It will be noted in Table XVIII, however, that 38 of the group, or one per cent of the total, gave 15 as the age.

In this and subsequent tables the following notation will be used: "M"—male, "F"—female, "T"—totals, "Ind"—industrial, "H. E."—home economics, "E. C."—English and citizenship, "Acad"—academic, "Com"—commercial, "P. E."—physical education, "Unc"—unclassified.

For the entire group the age range is from 15 to 60, but 54.4 per cent are between the ages of 15 and 19, while 17.7 per cent are over 24 years of age. The median is 19.61 and the distribution of the middle fifty per cent is from 17.77 to 23.02. As will be seen subsequently, these figures are raised by the presence of an English and citizenship group of higher age level.

Thus the public evening high school students are not a group of adults in the generally accepted use of the term, but rather a body of young people, who according to the findings of Thorndike are at the height of their learning power. The latter summarizes as follows:

TABLE XVIII

Distribution of the Total Number of Cases by Age, Sex, and Course

AGE	IND.		H. E.		E. C.		ACAD.		COM.		P. E.		TOTALS		T.	T. %
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
15	12	1	...	5	2	...	4	...	6	8	...	...	24	14	38	1.0
16	141	3	...	53	5	3	39	19	62	141	4	5	251	224	475	12.7
17	130	3	...	62	18	3	56	23	65	179	5	8	274	278	552	14.7
18	119	4	...	71	11	9	54	39	55	170	9	12	248	305	553	14.7
19	93	4	...	47	23	9	38	29	48	112	7	13	209	214	423	11.3
20	61	4	...	33	11	12	32	19	36	78	5	12	145	158	303	8.1
21	40	5	...	44	10	3	34	30	23	65	3	11	110	158	268	7.1
22	33	2	...	26	12	5	32	18	23	34	1	14	101	99	200	5.3
23	27	2	...	21	13	8	25	14	10	22	...	10	75	77	152	4.1
24	22	1	...	20	15	9	14	6	5	24	...	9	56	69	125	3.3
25	18	...	...	10	17	7	6	5	3	11	1	5	45	38	83	2.2
26	15	1	...	9	9	5	7	4	7	13	...	1	38	33	71	1.9
27	25	...	...	8	9	5	12	5	3	7	...	2	49	27	76	2.0
28	14	...	...	13	5	2	5	4	6	9	...	2	30	30	60	1.6
29	18	...	...	10	6	1	10	4	4	4	...	2	38	21	59	1.6
30–34	27	1	...	28	19	16	15	8	6	13	1	5	68	71	139	3.7
35–39	24	...	...	21	10	9	9	5	3	8	...	...	46	43	89	2.4
40–44	9	...	...	9	4	8	2	6	2	2	...	...	17	25	42	1.1
45–over	10	...	...	15	3	11	2	1	1	2	...	1	16	30	46	1.2
Totals	838	31	...	505	202	125	396	239	368	902	36	112	1840	1914	3754	100.0
Unc.	9	1	...	16	1	2	6	3	7	18	...	1	23	41	64	....

TABLE XIX

Age Groups of Total Number, Separated According to Sex and Course

AGE	IND.		H. E.		E. C.		ACAD.		COM.		P. E.		TOTALS		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.
15–19	495	15	....	238	59	24	191	110	236	610	25	38	1006	1035	2041
20–24	183	14	....	144	61	37	137	87	97	223	9	56	487	561	1048
25–29	90	1	....	50	46	20	40	22	23	44	1	12	200	149	349
30–over	70	1	....	73	36	44	28	20	12	25	1	6	147	169	316
Totals	838	31	....	505	202	125	396	239	368	902	36	112	1840	1914	3754
PERCENTAGES															
15–19	59.1	48.4	....	47.2	29.2	19.4	48.2	46.0	64.2	67.6	69.4	33.9	54.7	54.1	54.4
20–24	21.8	45.2	....	28.5	30.2	29.5	34.6	36.4	26.3	24.7	25.0	50.0	26.4	29.3	27.9
25–29	10.7	3.2	....	9.9	22.8	15.9	10.1	9.2	6.2	4.9	2.8	10.7	10.9	7.8	9.3
30–over	8.4	3.2	....	14.4	17.8	35.2	7.1	8.4	3.3	2.8	2.8	5.4	8.0	8.8	8.4
Totals	100.0	100.0	....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

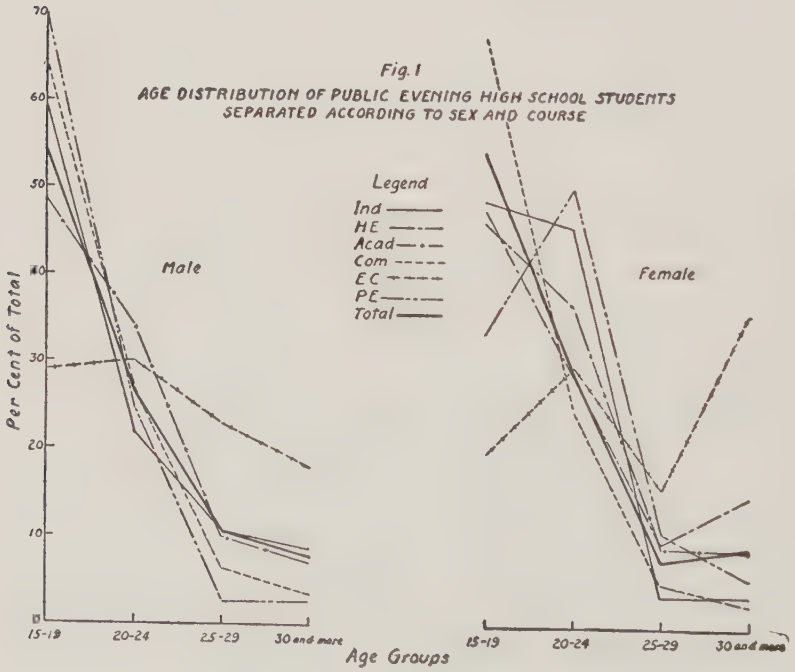
TABLE XX

COMBINED MALE AND FEMALE AGE GROUPS

AGE	IND.	H. E.	E. C.	ACAD.	COM.	P. E.	TOTALS
15–19	510	238	83	301	846	63	2,041
20–24	197	144	98	224	320	65	1,048
25–29	91	50	66	62	67	13	349
30—over	71	73	80	48	37	7	316
Totals	869	505	327	635	1,270	148	3,754

PERCENTAGES

15–19	58.7	47.2	25.4	47.4	66.6	42.6	54.4
20–24	22.7	28.5	29.9	35.3	25.2	43.9	27.9
25–29	10.4	9.9	20.2	9.8	5.3	8.8	9.3
30—over	8.2	14.4	24.5	7.5	2.9	4.7	8.4
Totals	100.0	100.0	100.0	100.0	100.0	100.0	100.0



"The general fact that inner growth changes and increases the ability to learn is of obvious importance to our inquiry; and so is the approximate date of cessation of inner growth in respect to ability to learn. This latter probably varies for different abilities. Its general average or mode seems from our results to be somewhere near twenty, though psychologists in general would probably be inclined to set it somewhat earlier. Consequently we can assert with reasonable surety that the fact of inner growth favors adults in comparison with children. Unless it is counterbalanced by factors acting in the opposite direction, inner growth gives the person from twenty-five to forty-five as good an ability to learn as he had from twenty to twenty-five, a better ability than he had from fifteen to twenty, and a much better ability than he had from five to fifteen."[1]

The age distribution found in this study finds corroboration in the following:

"The evening schools set no upper age limit for enrollment. The impression prevails that the evening high school student is an elderly person who has returned to school because of a realization of the need of further education for success in life. In part this is true, but only in a very small part. Let us stand in the corridor and observe the students as they leave at the end of the session. Here and there we see an older person sedately walking toward the door, but chiefly we see groups and couples—many couples—of young folks. Here and there is one in shabby clothes, but most of them are well dressed. In appearance they conform more nearly to our idea of a group of young college students than to the conventional idea of young workers. The general impression is one of youth; happy, chattering, bright-eyed, alert youth. They are well-mannered. They are unduly noisy but most of them are simply lively boys and girls.

Their ages range from sixteen to fifty-four. The average age is 19.5 years and 92 per cent of them are under twenty-four. The largest numbers in any age group come from the seventeen- and eighteen-year-olds. Those from sixteen to twenty years of age are 78 per cent of all; those from twenty-one to twenty-four years, 14 per cent. The fact that many of these are commercial students tends to lower the average age."[2]

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[1] Thorndike, E. L., *Adult Learning*, p. 126. These conclusions are drawn from the results of a number of experiments reported throughout the first ten chapters of the book.

[2] Siehl, B. H., "A Survey of a Night School," *The School Review*, Vol. 31 (September, 1923), p. 534.

Evans also supports the contention that the students of the public evening schools are comparatively young:

"The annual report of the Superintendent of Chicago Schools for 1921–1922 (Table ???) shows the following age distribution in evening schools:

Between 14 and 21 years—54.8 per cent of the total enrollment
Between 21 and 25 years—18.4 per cent of the total enrollment

The Philadelphia Public School Statistics for 1922–23 show:

14–15 years— 0.5 per cent of the total enrollment
16–20 years—53.6 per cent of the total enrollment
Total—54.1 per cent of the total enrollment

The Boston Public School Statistics for 1923–24 show:

14 years	1.9 per cent
15 years	3.5 per cent
16 years	9.9 per cent
17 years	9.9 per cent
18 years	9.0 per cent
19 years	8.0 per cent
20 years	6.8 per cent
14 to 20 years	49.0 per cent
21 to 25 years	21.5 per cent

These figures indicate that for city evening school systems about 50 per cent of the pupils enrolled are under 21 years; 20 per cent are between 21 and 25 years; and 30 per cent are older than 25 years."[3]

It will be noted that these statistics supplied by Evans are for entire school systems and include the elementary school group. The age level of the high school students taken alone would probably be lower, as can be seen from the following figures for the Philadelphia Public Evening Elementary Schools for years 1926, 1927, and 1928.

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[3] Evans, Owen D., *op. cit.*, pp. 106–109.

"AGE RANGE	YEAR		
	1926	1927	1928
16 to 20	1999	1707	1209
Per cent of Total	32.3	31.5	29.8
21 and Over	4194	3709	2849
Per cent of Total	67.7	68.5	70.2
Total	6183	5416	4058
Per cent	100	100	100

It is evident that the age levels for the group here represented are considerably higher than those given in Table XIX of this study. These elementary school statistics have been taken from the annual reports of the Division of School Extension of Philadelphia."[4] [5] [6]

While the age figures for the entire group in the study at hand are significant, it is probably more important to consider the age distribution in the various courses. Thus we find the following statistics:

COURSE	MEDIAN	DISTRIBUTION OF MIDDLE FIFTY PER CENT	RANGE
Industrial (male)	19.19	17.44 to 22.99	15 to 57
Industrial (female)	20.13	18.19 to 21.85	15 to 33
Home Economics (female)	20.44	18.88 to 24.84	15 to 56
English and Citizenship (male)	23.69	19.63 to 27.61	15 to 55
English and Citizenship (female)	25.21	20.60 to 33.98	16 to 60
Academic (male)	20.22	18.00 to 23.52	15 to 48
Academic (female)	20.50	18.46 to 23.16	16 to 52
Commercial (male)	18.93	17.37 to 21.17	15 to 52
Commercial (female)	18.72	17.43 to 20.85	15 to 48
Physical Education (male)	19.00	18.00 to 20.40	16 to 30
Physical Education (female)	21.55	19.23 to 23.90	16 to 34
Total (male)	19.59	17.68 to 23.24	15 to 57
Total (female)	19.61	17.87 to 22.85	15 to 60
Grand total	19.61	17.77 to 23.02	15 to 60

[4] *1926 Report*, p. 48.
[5] *1927 Report*, p. 59.
[6] *1928 Report*, p. 29.

These figures and those presented in Tables XVIII, XIX, and XX and Fig. 1, disclose some interesting facts. Thus the total group of males differs little from the total group of females on the basis of age. This, however, is not the case within the various courses. In the commercial classes the female group is somewhat younger than the male group, whereas in the physical education and English and citizenship classes the females are appreciably older. In the academic classes there is little age difference between the sexes. Among the industrials the percentage of males is higher below the 19-year level and above the 30-year level, but the number of females included in this group is hardly sufficient to enable one to draw conclusions. The same is true of the physical education males.

A comparison of the course groups on the basis of age seems to offer significant and in some cases unexpected results. For example: the commercial group has the lowest median; the industrial male median is only 0.26 of a year higher than that of the commercial males; the median of the home economics (female) students is about the same as that of the academic female group; the English and citizenship female median is by far the highest of all, and this is followed by the English and citizenship male and the physical education female medians.

In this connection it might be well to turn again to Evans who quotes results of an unpublished survey made by B. H. Siehl in Cincinnati in 1924–25. It concerns a vocational evening school.

"There is a strong belief among evening school administrators that vocational students are decidedly older than academic or commercial students. Yet this group averaged 20 years as against 19.6 for the other group; 76 per cent were under 22 years of age. Only 15 per cent were married. The surprisingly large proportion of 69 per cent had had schooling above the eighth grade."[7]

That the general age level of the industrial group seems to have decreased in recent years is indicated by the following:

Speaking of the Smith-Hughes Act—"Statistics from the Federal Board of

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[7] Evans, Owen D., *op. cit.*, pp. 137–140.

Vocational Education show that at the beginning of the operation of this law, the average age for evening industrial pupils was between twenty-three and twenty-four years. Figures in a cosmopolitan evening school in St. Cloud, Minnesota, show two-thirds of the pupils to be over twenty-one years of age."[8]

Age and Persistence

Reference is here made to Tables XXI, XXII, XXIII, and XXIV and Fig. 2. Tables XXI and XXII contain the statistical details on the basis of which the summaries of Tables XXIII and XXIV have been drawn, and they have been presented for the reader who is interested in an age grouping different from that to be found in the latter tables. No conclusions have been drawn directly from Tables XXI and XXII.

Tables XXIII and XXIV picture the comparative persistence of the various age groups represented, male and female. For this purpose a so-called "persistence-percentage" has been used, this being in each case the percentage which is obtained when the number of stay-ins is divided by the number of stay-ins plus the number of drop-outs. The symbol "P" has been used to designate it here and elsewhere throughout the study. In similar fashion "S" has been used for stay-ins, and "D" for drop-outs.

A study of Tables XXIII and XXIV reveals that the persistence-percentage of the males is slightly higher than that of the females. This seems partially due to the preponderance of males in the industrial classes, which seem to have exceptional holding power. We might be tempted to infer that the exceptional results to be found in the industrial classes are due to the fact that they are males rather than industrials, but a glance at the totals for the other male groups shows that they all have lower persistence-percentages than the females in the same courses. Among the males the persistence-percentages for the English and citizenship, academic and commercial groups are about the same, but that for the physical education group is roughly half that of any of the others. Here again, however, one must keep in mind the small number involved. But substantiation is found in the

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[8] Friese, John F., *The Cosmopolitan Evening High School*, p. 6.

TABLE XXI

Stay-ins and Drop-outs at Each Age—Male

AGE	IND.		H. E.		E. C.		ACAD.		COM.		P. E.		TOTALS		
	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.	T.
15	8	3	....	....	1	1	4	0	2	4	....	....	15	8	23
16	96	43	....	....	3	2	20	19	33	27	2	2	154	93	247
17	80	39	....	....	10	8	32	24	36	28	1	4	159	103	262
18	70	37	....	....	6	5	28	26	28	26	3	6	135	100	235
19	48	28	....	....	11	12	15	23	22	24	2	5	98	92	190
20	35	15	....	....	4	7	19	12	19	17	0	5	77	56	133
21	25	12	....	....	6	4	16	17	14	9	2	1	63	43	106
22	16	13	....	....	5	7	16	16	14	8	1	0	52	44	96
23	16	6	....	....	8	3	11	14	6	4	....	....	41	27	68
24	10	12	....	....	7	8	10	4	3	2	....	....	30	26	56
25	13	3	....	....	7	10	5	1	1	2	0	1	26	17	43
26	7	6	....	....	6	3	3	4	7	0	....	....	23	13	36
27	10	14	....	....	5	4	10	1	1	2	....	....	26	21	47
28	9	4	....	....	2	3	3	2	3	3	....	....	17	12	29
29	12	6	....	....	3	3	5	5	3	1	....	....	23	15	38
30–34	17	7	....	....	13	6	5	8	3	3	0	1	38	25	63
35–39	18	6	....	....	6	4	4	5	1	2	....	....	29	17	46
40–44	6	3	....	....	2	2	2	0	0	2	....	....	10	7	17
45–over	8	2	....	....	2	1	0	2	1	0	....	....	11	5	16
Totals	504	259	....	....	107	93	208	183	197	164	11	25	1027	724	1751

TABLE XXII

Stay-ins and Drop-outs at Each Age—Female

AGE	IND.		H. E.		E. C.		ACAD.		COM.		P. E.		TOTALS		
	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.	T.
15	1	0	3	2	....	....	....	....	6	2	....	....	10	4	14
16	2	1	17	35	2	1	13	4	73	65	0	5	107	111	218
17	2	1	32	29	3	0	6	13	96	80	4	2	143	125	268
18	3	1	33	33	6	3	11	9	91	70	5	6	149	122	271
19	1	3	27	20	6	2	10	9	61	47	5	8	110	89	199
20	2	2	18	14	7	5	11	5	40	34	6	6	84	66	150
21	1	3	32	11	3	0	13	16	36	27	7	4	92	61	153
22	2	0	14	12	4	1	5	13	15	18	9	5	49	49	98
23	2	0	14	7	6	2	8	3	14	8	7	3	51	23	74
24	0	1	12	8	6	3	5	0	10	12	3	6	36	30	66
25	....	....	7	2	4	3	5	0	10	1	2	3	28	9	37
26	....	....	5	4	5	0	3	1	9	4	1	0	23	9	32
27	....	....	5	3	5	0	4	1	4	2	1	1	19	7	26
28	....	....	10	3	2	0	1	1	5	3	1	1	19	8	27
29	....	....	9	1	0	1	3	1	2	2	0	2	14	7	21
30–34	1	0	21	7	11	5	6	2	5	8	2	2	46	24	70
35–39	....	....	13	8	7	2	3	2	8	0	....	....	31	12	43
40–44	....	....	9	0	4	4	5	1	....	....	0	1	18	6	24
45–over	....	....	13	2	8	3	1	0	2	1	....	....	24	6	30
Totals	17	12	294	201	89	35	113	81	487	384	53	55	1053	768	1821

TABLE XXIII

Persistence-Percentages of Various Age Groups—Male

AGE	IND.			E. C.			ACAD.			COM.			P. E.			TOTALS			
	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	T.
15–19.....	302	150	66.8	31	28	52.5	99	92	51.8	121	109	52.6	8	17	32.0	561	396	58.6	957
20–24.....	102	58	63.7	30	31	49.2	72	63	53.3	56	40	58.4	3	6	33.3	263	198	57.0	461
25–29.....	51	33	60.7	23	23	50.0	26	13	66.7	15	8	65.2	0	1	....	115	78	59.6	193
30–Over....	49	18	73.1	23	13	63.9	11	15	42.3	5	7	41.7	0	1	....	88	54	62.0	142
Totals....	504	259	66.1	107	95	53.0	208	183	53.2	197	164	54.6	11	25	30.6	1,027	726	58.6	1,753

TABLE XXIV

PERSISTENCE-PERCENTAGES OF VARIOUS AGE GROUPS—FEMALE

AGE	IND.			H. E.			E. C.			ACAD.			COM.			P. E.			TOTALS			
	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	T.
15–19...	9	6	60.0	112	119	48.5	17	6	73.9	40	35	53.3	327	264	55.3	14	21	40.0	519	451	53.5	970
20–24...	7	6	53.8	90	52	63.4	26	11	70.3	42	37	53.2	115	99	53.7	32	24	57.1	312	229	57.7	541
25–29...	..	..	....	36	13	73.5	16	4	80.0	16	4	80.0	30	12	71.4	5	7	41.7	103	40	72.0	143
30-Over.	1	..	....	56	17	76.7	30	14	68.2	15	5	75.0	15	9	62.5	2	3	40.0	119	48	71.3	167
Totals.	17	12	58.6	294	201	59.4	89	35	71.8	113	81	58.2	487	384	55.9	53	55	49.1	1053	768	57.8	1821

fact that the physical education group has the lowest persistence-percentage in the female group as well as the male. The highest in the female group is to be found in the English and citizenship classes; while the industrial, home economic and academic groups have about the same percentages, and that of the commercials is comparatively low.

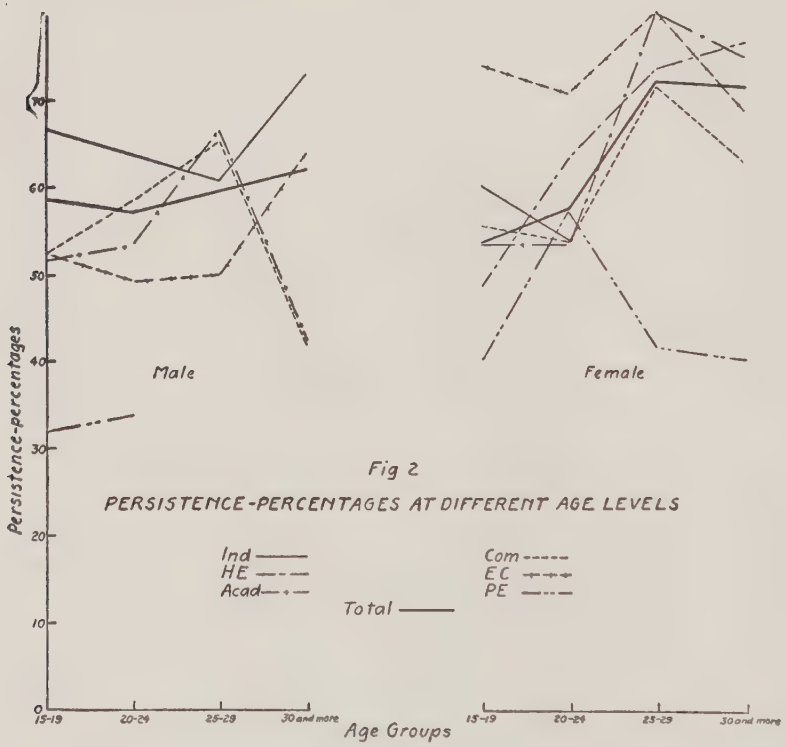

Fig 2

PERSISTENCE-PERCENTAGES AT DIFFERENT AGE LEVELS

A comparison of the various age groups is best made by reference to Fig. 2. Considering first the males, it is evident that in general age does not seem to bear much relationship to persistence. The 20–24 year group, however, have the poorest record; the 15–19, 25–29, and 30-over following in order, with differences of only 1.6, 1.0 and 2.4 respectively. The entire range is only 5.0. The industrial and English and citizenship groups have

pronounced peaks at the highest age levels, the former showing a low point at the 25–29 level. This however is decidedly the high point of the commercials and academics, both of which are depressed at 30-over. The physical education curve is not plotted beyond the 20–24 year abscissa because of scarcity of numbers.

The female group shows greater variation at the various age levels. The 15–19-year-old students have the lowest percentage of persistence and these are followed in order by the 20–24 group, the 30–over group, and finally the 25–29 group. The differences from group to group are respectively 4.2, 13.6, and 0.7. The entire range is 18.5. This might be partially explained by the high percentage of commercial students here included. The commercial students are comparatively young, as has been seen, and the ratio of persistence for commercials is relatively low. To many of these commercial girls evening school attendance seems to be extremely incidental; they rank relatively high in day school education and many attend evening school merely to gain some specific ability or to brush up on something which they have previously had; a purpose which could be satisfied in a short unit course. Moreover, as would be expected, and as interviews indicated, the younger girls seem to have greater interest in social affairs. On the other hand one would perhaps suppose that the greater percentage of married women at the higher age levels would tend to reduce the persistence-percentages at those points because of the various home duties which confront the married woman. As will be shown later this actually is not the case, because the married women have a considerably higher percentage than the single women, the single men, or the married men. This would have a tendency to raise the persistence-percentage of the women at the higher age levels.

As in the case of the male group the female academics and commercials are peaked at the 25–29 year point, but unlike the situation found in the English and citizenship male group, the English and citizenship female group is also elevated at 25–29. The home economics group shows almost a direct straight line variation. The physical education graph is highest at the 20–24 point.

In these interpretations and in others which follow throughout the study, due regard must always be given to the numbers under consideration. In this case the numbers are to be found in Tables XXIII and XXIV, and in subsequent cases statistics will always be furnished.

In Tables XXIII and XXIV and in the tables which follow, wherever persistence is being considered certain omissions have been made; which accounts for the fact that the total number of students represented in each case is less than the total number reported in Table XVIII. These omissions include four plumbing classes involving a total of 62 members; two chemistry classes for nurses containing a total of 42 students; and 90 students who could not accurately be classified as stay-ins or drop-outs, 54 of whom had transferred from one class to another during the year. In addition each table has certain other omissions caused by an insufficiency of data on the basis of which the particular table has been formulated. Thus in Tables XXIII and XXIV those pupils have been eliminated whose ages could not be determined with certainty. These latter omissions are, however, relatively few in number in each case. The plumbing classes have been omitted because the plumbers' union was interested in the attendance of these students and the persistence was almost perfect, so that any comparisons which would include this group would be obviously unfair. The chemistry classes for nurses were influenced in much the same manner. The members of these classes were nearly all nurses who were forced to attend by the hospitals where they were employed, with the result that here too there was practically no elimination. Moreover one of these classes operated for only 12 weeks instead of the regulation 26 weeks.

Race and Persistence

All of the students considered in this study are members of the white race with the exception of 113 Negroes and 2 Filipinos. The data for the colored group are given in Tables XXV to XXVIII inclusive, and in Fig. 3.

Of the 113 colored students included in Table XXV, the males number only 22, the females 89, and the remaining 2 are unclassi-

fied. These individuals show an exceptionally high persistence-percentage, that of the females being the better of the two.

The English and citizenship and physical education groups have not been included in Table XXV because they contain no colored members.

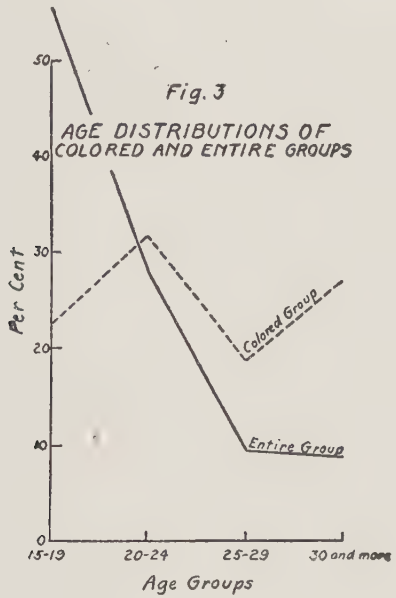

TABLE XXV

TOTAL NUMBER OF COLORED STUDENTS, AND PERSISTENCE

	IND.		H. E.		ACAD.		COM.		TOTALS			
	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.	P	T
Male.....	7	1	..	..	6	4	2	2	15	7	68.2	22
Female.....	..	..	40	9	12	3	17	8	69	20	77.5	89
Totals....	7	1	40	9	18	7	19	10	84	27	75.7	111
Unclassified												2
Total...												113

Table XXVI gives an age distribution of the colored students, together with persistence-percentages for the female group below 25, and that of 25 and over. Percentages for the males have not been included because of the small numbers in the various categories.

It will be noted that the age level of these colored people is considerably higher than that of the entire group under investigation. Fig. 3 presents this fact more clearly than the table. The median for the males is 27.00, and for the females 23.92. This would seem to offer some explanation for the persistence of this group, because here there is a preponderance of females, and in Fig. 2 it was shown that at the higher age levels the persistence of the females was greater than that of the males. This was also more true of the home economics group, where a high percentage of these colored students are to be found, than of the entire female group. However, on examination of Table XXVI it is found that the persistence-percentage for the 15–24-year group is 75.9 as against 75.5 for the students of 25 years and over. In short, the younger portion of the colored student body persist slightly better than the older members.

TABLE XXVI

AGE DISTRIBUTION AND PERSISTENCE OF COLORED STUDENTS

AGE GROUPS	MALE		FEMALE			TOTALS		PER CENT OF TOTAL
	S.	D.	S.	D.	P.	T.	P.	
15–19	2	1	15	6	77.1	24	75.9	22.4
20–24	5	2	22	5		34		31.8
25–29	6	1	10	3	78.4	20	75.5	18.7
30—over	2	3	19	5		29		27.1
Totals	15	7	66	19		107		100.0
Unclassified						6		
						113		

In Table XXVII, 40.9 per cent of the colored students are married. This should be contrasted with the statistics in Table XXIX where we shall find that 216 out of 1563 or only 13.8 per cent of the entire male group, and only 194 out of 1724 or 11.3 per cent of the total female group are married. This would seem to give rise to a greater stability of purpose on the part of this group of colored people, and to less in the way of social competition to evening school attendance. However, of the 105 students listed in Table XXVII the married group have almost the same persistence-percentage as the single group: 79.1 compared with 79.0. Both of these percentages probably should be slightly lower, because 6 students of the 111 considered in Table XXV, whose marital condition could not be determined, included 1 stay-in and 5 drop-outs. It is evident, however, if these figures are reliable, that married life does not seem to be a significant factor in the persistence of colored public evening high school students.

TABLE XXVII

DISTRIBUTION OF COLORED STUDENTS ON MARITAL BASIS—AND PERSISTENCE

MARITAL CONDITION	MALE			FEMALE			TOTALS				PER CENT OF TOTAL
	S.	D.	P.	S.	D.	P.	S.	D.	P.	T.	
Married..	5	2	....	29	7	80.6	34	9	79.1	43	40.9
Single....	12	1	....	37	12	75.5	49	13	79.0	62	59.1
Totals.	17	3	85.0	66	19	77.6	83	22	79.0	105	10.0
Unclassified....										8	
										113	

Table XXVIII presents statistics on the extent of day school education of 105 of the entire group of 113 colored students. The other 8 could not be classified with certainty.

The important fact to note here is that the educational background of these people is approximately the same as that of the entire group of Table XXXVI. The median of the entire male group is 8.77 and of the females 9.52, while the medians furnished

in Table XXVIII are 8. 83 for the former and 9.29 for the latter. The median grade completed by the entire colored group is 9.15.

TABLE XXVIII

DAY SCHOOL EDUCATION OF COLORED STUDENTS

LAST GRADE COMPLETED	MALE	FEMALE	TOTALS	PERCENT OF TOTAL
Below 6	1	6	7	6.7
6	4	5	9	8.6
7	1	11	12	11.4
8	6	16	22	20.9
9	5	12	17	16.2
10	2	17	19	18.1
11	1	4	5	4.8
12	1	9	10	9.5
Over 12	1	3	4	3.8
Totals	22	83	105	100.0
Medians	8.83	9.29	9.15	

The persistence results here presented show an exceptional record for the colored group. It might be that these figures are exaggerated, but reports from cities which have large percentages of colored students in their evening schools show that these people have better attendance records than are credited to the whites. For example, a report covering all the public night schools of New Orleans shows an average attendance of 1590 out of a total enrollment of 3671, in the white schools. The percentage of attendance is 43.3. In the colored schools the attendance is 1196 out of an enrollment of 2331, for a percentage of 51.7.[9]

From Baltimore comes evidence of like character, although at first glance it appears to contradict that from New Orleans. In 1926–27 the percentage of attendance of the whites was 74.0 as against 70.0 for the colored students. In 1927–28 the corresponding figures were 81.3 and 72.1, and in 1928–29 they were 75.7 and 74.5. But a further investigation of the statistics here

[9] *Annual Report of the New Orleans Public Schools of the Parish of Orleans* (1920–21), p. 79.

presented shows that these percentages were based on what were termed "average net rolls" whereas if "total enrollment" had been used in each case the results would have been decidedly in favor of the colored group. For example in 1928–29 the total enrollment of whites was 10,727 and this was reduced by withdrawals to an average net roll of 6,870, which combined with the average attendance of 5,206 gave a percentage of attendance of 75.7. If 10,727 had been used instead of 6,870 the percentage of attendance would have been 48.5. On the other hand the total enrollment of the colored group was 2,862 and this was reduced to an average net roll of 2,298. The average attendance was 1,714, which gave on the basis of the average net roll a percentage of attendance of 74.5. If in this case the total enrollment of 2,862 had been used as the base the percentage of attendance would have been 59.9. The figures could be interpreted in the same way for the other years quoted.[10] [11] [12]

On the basis of the results found in this study and the statistics presented from these two cities, the conclusion would appear to be that the colored group have greater persistence in evening school. The fact that a greater superiority is indicated in this study than in the reports quoted might be due to the inclusion in those reports of elementary as well as high school groups. The colored group attending the evening high schools are probably a more selected portion of their race than is the case with the whites.

No discussion of the effect of race on persistence and attendance in evening school would be complete without some reference to the practice of segregation. The following quotation has been taken from a study made in the public evening elementary schools of Philadelphia in 1930. It included three schools: one of them an all-colored organization, and the other two with white teachers and principals, and a pupil population racially mixed. The numbers of colored students involved seem to have been about 400 in each of the years noted: about 200 in the colored school, and about 200 in the other two schools combined.

"The tendency of more frequent drops of colored pupils in schools of mixed

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[10] *Report of the Board of School Commissioners*, Baltimore, Md. (1927), p. 155.
[11] *Ibid.* (1928), p. 118.
[12] *Ibid.* (1929), p. 167.

pupilage than in those of colored pupilage may be a normal situation. This inference may be drawn from the consideration of close of term percentages of attendance for the last four years of three schools used in this study. Table ???? shows these figures as taken from the reports of the Division of School Extension, Philadelphia, for the years from 1926 to 1929. The figures are for the close of the regular evening school term when the full force of first term drops attendance is effective. The first group in the table shows the figures for the year 1926. In this the Reynolds School, the colored organization, has an attendance percentage of 42.5 which is almost six points higher than the Kearny and almost four points higher than the Miller. In 1928 the Reynolds shows a percentage of 41.6 which is almost five points higher than the Kearny and is more than seven points higher than the Miller. The year 1929 shows the Reynolds with 45.1 per cent of attendance which is almost five points higher than the Kearny and is three points higher than the Milier."[13]

The regularity of these figures would seem to indicate that for the colored group attendance is improved by segregation. It is possible, however, that some other persistent factor is operating on the attendance records of these three schools.

Marriage and Persistence

Table XXIX shows that the percentage of married males is 13.8 and of married females 11.3; or putting it differently, approximately one in every seven males is married and one in every nine females is married. The married group is thus comparatively small especially when one considers that it is appreciably increased by the presence of 23.8 per cent married men and 41.7 per cent married women in the English and citizenship classes. The commercial classes, as might be expected from previous figures on age, show the smallest percentage of married students; males 5.1 per cent, and females only 2.2 per cent. With the exception of the English and citizenship classes, the industrial males and home economics females show the highest percentages of married students.

The totals for the male group show a superiority in persistence for the unmarried, to the extent of 58.3 to 56.5. This superiority holds in all courses except the commercial where the percentage of married men is too small to be significant.

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[13] O'Boyle, John, Unpublished Master's Thesis, Temple University (1930).

TABLE XXIX

PERSISTENCE-PERCENTAGES OF MARRIED AND SINGLE STUDENTS

COURSE	MALE									
	MARRIED			SINGLE			TOTALS			PER CENT MAR.
	S.	D.	P.	S.	D.	P.	MAR.	SIN.	T.	
Ind.....	73	46	61.3	377	196	65.8	119	573	692	17.2
E. C.....	24	22	52.2	79	68	53.7	46	147	193	23.8
Acad.....	17	19	47.2	184	150	55.1	36	334	370	9.7
Com.....	8	7	53.3	139	139	50.0	15	278	293	5.1
P. E.....	0	0	....	7	8	46.7	0	15	15	0.0
Totals...	122	94	56.5	786	561	58.3	216	1347	1563	13.8
	FEMALE									
Ind.....	2	0	....	16	12	57.1	2	28	30	6.7
H. E.....	63	38	62.4	213	152	58.4	101	365	466	21.7
E. C.....	33	17	66.0	53	17	75.7	50	70	120	41.7
Acad.....	8	6	57.1	93	69	57.4	14	162	176	8.0
Com.....	11	7	61.1	447	360	55.4	18	807	825	2.2
P. E.....	3	6	33.3	46	52	46.9	9	98	107	8.4
Totals...	120	74	61.9	868	662	56.7	194	1,530	1,724	11.3

The results for the female group are, however, quite different. Here the married women have a persistence-percentage of 61.9 as against 56.7 for the unmarried. This is due in part to the record of the home economics group which includes a large part of the entire female group; to the high percentage of unmarried females in the commercial classes, which have a comparatively low persistence-percentage; and to the same situation in the physical education classes.

These figures show a pronounced superiority for the female married group, with the single males a poor second, and practically nothing to choose between the other two groups.

Turning again to the study made by O'Boyle in the public evening elementary schools of Philadelphia, in the chapter devoted to a consideration of sex and marital relation as factors in elimination, one finds:

"Of the 175 single males, 45 dropped for a percentage of 25.7. Of the 95 single females, 22 dropped for a percentage of 23.1. Among the 98 married men there are 38 drops, a percentage of 38.7. Among the 131 married women, there are 38 drops, a percentage of 21.3. Viewed from this angle the married women looked like the best school prospects and the married males the worst, with little to choose between the single males and females."[14]

The Number and Persistence of Those Who Received Their Day School Educations in Foreign Countries

It seemed more significant from the standpoint of this study to consider separately those who had received their entire day school educations in foreign countries, than to separate the entire group into native born and foreign born for purposes of comparison. A large portion of the foreign born had come to this country at an early age and had received their day school educations in this country. Apparently they would not differ as a group from those who were of foreign parents in this country.

In Table XXX the six countries having the largest representations of such students have been listed separately, and all others have been placed in a single category. Germany and Italy are far in advance of any of the others in point of numbers concerned, the former with 126 and the latter with 112 of the total 422 considered in the table. Of these 422 a total of 310 are found in the various English and citizenship classes. Except in the cases of the German, Italian, and Miscellaneous groups the numbers represented are not sufficient to be of significance from the standpoint of persistence. We note, however, the comparatively high persistence-percentage for the German group and the low percentage for the Italian. The Miscellaneous group exceeds any of the others in persistence.

The persistence-percentage for the English and citizenship group is 60.1 which is slightly higher than the composite persistence-percentage for the entire study, but this is far surpassed by the 67.9 percentage of the group of foreign educated students who are not in the English and citizenship classes. This high ratio might be due to the fact that those who emigrate to the

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[14] O'Boyle, John, *op. cit.*

TABLE XXX

NUMBER AND PERSISTENCE OF THOSE WHO RECEIVED THEIR DAY SCHOOL EDUCATIONS IN FOREIGN COUNTRIES

	IND.		H. E.		E. C.		ACAD.		COM.		P. E.		TOTALS				TOTALS MINUS E. C.		
	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.	P.	T.	S.	D.	P.
Germany	3	1	..	..	68	44	9	1	..	..	..	..	80	46	63.5	126	12	2	....
Italy	5	4	..	..	52	46	2	2	..	..	..	1	59	53	52.7	112	7	7	....
Poland	2	1	..	..	19	9	1	1	..	..	..	..	22	11	66.7	33	3	2	....
Russia	0	1	..	..	11	6	5	6	..	..	..	..	16	13	55.2	29	5	7	....
Ireland	8	2	1	0	0	0	5	4	4	2	..	..	18	8	69.2	26	18	8	....
Scotland	3	3	2	1	0	0	1	2	3	0	..	..	9	6	60.0	15	9	6	....
All others	12	2	2	0	36	19	6	2	2	0	..	..	58	23	71.6	81	22	4	....
Totals	33	14	5	1	186	124	29	18	9	2	..	1	262	160	62.1	422	76	36	67.9

United States after the completion of day school education, and who are in classes other than the English and citizenship, probably are a selected group. Many of them have attended Americanization classes in previous years, and have survived the selective process which operates in successful evening school attendance. Moreover, they are not so well acquainted socially as our native born public evening school students, nor so dependent socially as are those whose lack of ability in English makes it necessary for them to attend English and citizenship classes. The writer's observation of several of these students in academic classes leads him to hazard the opinion that they are exceptionally ambitious and serious about the work.

The Number and Persistence of Those Who Had Difficulty in Understanding English

Owing to the apparent possibility that a number of the evening school students leave because their insufficient understanding of English proves too much of a handicap, it seemed worthwhile to consider separately the group, who on the questionnaire claimed to have difficulty in understanding English. In classes other than English and citizenship, the total number represented in this group is 124; and since in the English and citizenship classes provision is made for this lack of understanding, only these 124 have been tabulated in Table XXXI.

In the interviews which will be reported later the writer found none who had difficulty in understanding ordinary English, with the exception of some English and citizenship students. On the basis of this, it is probable that this total of 124 is much too high, that many are included who did not have trouble in understanding ordinary English but who felt that their knowledge of English was inadequate. It might be, however, that many who could understand conversational English found the language of the classroom too difficult for them.

Whether or not these 124 have been accurately culled from the entire group for the purpose at hand, the fact remains that their persistence is slightly higher than that for the entire group, as given in Tables XXIII and XXIV. Table XXXI gives a persistence-percentage of 58.9 as compared with 58.2 for the en-

tire group. It is interesting too, to note that these students seem to persist better in the academic classes than in the industrial classes, where the demands on their English would be less severe.

If dependence can be placed in these figures, lack of understanding of English is not very prominent as a factor in elimination, nor is it very prominent as a characteristic of the public evening high school group. With due regard for the inaccuracies resident in pupil response to such questions as this, it seems probable that these figures are substantially correct for the following reasons:

1. As will be demonstrated later the students in the public evening school represented in this study, have educational backgrounds comparable with those who attend day high schools. In addition they have post-school experience.
2. The evening school work which is being followed by these students is for the most part below day high school grade. The subjects are often listed as high school subjects but they are administered more slowly and with less severity than in the day school.
3. The night school teacher usually finds it possible to give more individual aid in the classroom than can be given in the day school.
4. The teachers of the classes included in this investigation were mostly experienced people who had learned to reduce the difficulty of the work to a minimum.

On the other hand it is worth while to consider the following from W. W. Charters:

"In my opinion, the problem of greatest significance in the whole field of adult education is a vocabulary problem . . . It is becoming increasingly apparent that research studies are necessary in order to discover just what vocabularies adult students with varying degrees and kinds of previous education and experience do possess."[15]

Mode of Transportation to Evening School, and Persistence

On the questionnaire five modes of transportation were listed: trolley, bus, automobile, walking, and elevated. But

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[15] "Next Steps", *Journal of Adult Education*, October, 1930, pp. 370–375.

TABLE XXXI

Number and Persistence of Those Who Had Difficulty in Understanding English

SEX	IND.		H. E.		ACAD.		COM.		P. E.		TOTALS			
	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.	S.	D.	P.	T.
Male	17	14	....	....	18	12	8	10	1	0	44	36	55.0	80
Female	....	....	11	5	6	5	12	3	0	2	29	15	65.9	44
Totals	17	14	11	5	24	17	20	13	1	2	73	51	58.9	124

in the discussion which follows, those who used trolley, bus, or elevated have been grouped together.

TABLE XXXII

MODE OF TRANSPORTATION TO EVENING SCHOOL, AND PERSISTENCE

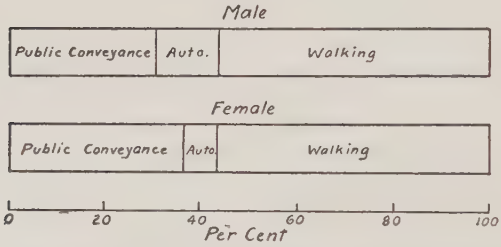
	MALE								
	TROLLEY, BUS, ELEVATED			AUTOMOBILE			WALKING		
	S.	D.	P.	S.	D.	P.	S.	D.	P.
Ind.	157	73	68.3	76.5	47.5	61.7	269.5	138.5	66.1
E. C.	31	37	45.6	8	8.5	48.5	68	47.5	58.8
Acad.	54.5	49	52.7	16.5	17.5	48.5	137	99.5	57.9
Com.	64	55.5	53.6	28	30.5	47.9	104	84	55.3
P. E.	1	3	....	2	0	....	8	22	26.7
Totals.	307.5	217.5	58.6	131	104	55.7	586.5	391.5	60.0
	FEMALE								
Ind.	7.5	6	55.6	1.5	0	....	10	6	62.5
H. E.	102.5	61	62.7	16	19	45.7	182.5	124	59.5
E. C.	33	10.5	75.9	7	5	58.3	49	20.5	70.5
Acad.	37	24.5	60.2	4	5	44.4	70	48.5	59.1
Com.	186.5	156	54.5	34	30	53.1	274.5	206	57.1
P. E.	25.5	23	52.6	6.5	5	56.5	20	26	43.5
Totals.	392	281	58.2	69	64	51.9	606	431	58.4
	MALE AND FEMALE COMBINED								
Totals.	699.5	498.5	58.4	200	168	54.3	1192.5	822.5	59.2

Table XXXII gives the data, which are pictured in Fig. 4. Speaking first of the male group it can be seen that 525 came to school by trolley, bus or elevated; while 235 were transported by automobile; and 978 walked. The percentages represented here are respectively: 30.2, 13.5, and 56.3. As might be expected the group who walked to school show the highest percentage of persistence, but as might not be expected this is only 1.4 better

than that of the group who traveled by public conveyance. The automobile group records 2.9 less than the latter.

Fig. 4

MODE OF TRANSPORTATION
TO EVENING SCHOOL



Figures for the female group are somewhat similar. Of the 1843 under consideration 673 or 36.5 per cent traveled by trolley, bus or elevated; 133 or 7.2 per cent by automobile; and 1037 or 56.3 per cent walked to school. Compared with the percentage figures of the males the first of these is somewhat higher, the second lower, while the third is exactly the same. Here again the ranking on the basis of persistence is the same as in the male group, but the differences are not quite the same. The difference between the persistence-percentages for those who walked to school and those who rode by public conveyance is only 0.2, while that between the latter group and those who traveled by automobile is 6.3. The automobile group of females has a particularly low percentage of persistence.

Considering the entire group one would probably expect those who walk to school to persist to a greater extent, because generally they are closer to the school, can get there more quickly and conveniently, and there is no expense. Because of these considerations it seems a bit surprising to find that the group who travel by trolley, etc., have almost an equally good record for persistence. It might be that the latter are a more determined group, or it might be that many of them have more definite objectives and are attending schools at great distances because they can get there what they want. This is corroborated by the high persist-

ence-percentage for the industrial males, many of whom come from considerable distances to get special industrial work which is offered only in certain schools. There would probably not be the same tendency among these people merely to drift into evening school.

On first thought it might perhaps be felt that those who travel by automobile would have a tendency to persist longer in evening school because of the greater comfort in transportation and the saving in time. However, the reverse is decidedly the case. The possible explanation for this has perhaps been found in some of the interviews. Two of those interviewed, who had been driving to school, said that they had stopped because their automobiles were laid up for repairs, while four others who had been riding with friends stopped because for various reasons the friends' cars were no longer available.

In view of the fact that 2,015 or 56.3 per cent of the 3,581 considered in Table XXXII walk to evening school it is evident that these schools are very conveniently located, at least for those who attend. The situation for the city at large is probably somewhat better than this because three of the four schools studied draw from comparatively large areas. The discussion which follows, that of "time taken to get to evening school", will further emphasize the convenience of these schools for the pupils concerned.

In Table XXXII it will be noticed that some of the numbers of cases are given with a decimal point followed by 5. This arises out of the fact that in cases where the individual underlined two methods of transportation each was given a weight of 0.5. This, however, involved less than 5 per cent of the cases.

Time Taken to Get to Evening School, and Persistence

The data for this discussion are found in Table XXXIII and Figs. 5 and 6. In the questionnaire most of the responses to this question were given in even multiples of five and it was decided to tabulate on this basis. Thus the 5- and 10-minute group include all who wrote either 5 or 10 in answer to the question, and in addition any who gave the exact number of minutes to 12.

TABLE XXXIII

Time Required to Get to Evening School, and Persistence

MALE

MINUTES	IND.			H. E.			E. C.			ACAD.			COM.			P. E.			TOTALS			
	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	T.
5 and 10.....	174	83	67.7	...	...	...	42	25	62.6	63	63	50.0	73	48	60.3	5	15	...	357	234	60.4	591
15 and 20.....	193	113	63.1	...	...	...	42	48	46.7	108	75	59.0	72	81	47.0	4	5	...	419	322	56.5	741
25 and 30.....	95	36	72.5	...	...	...	19	20	48.7	30	26	53.6	42	32	56.7	1	4	...	187	118	61.3	305
35 and over....	29	19	60.4	...	...	...	4	3	...	5	7	...	9	9	...	...	...	...	47	38	55.3	85
Totals.....	491	251	..	...	...	...	107	96	...	206	171	...	196	170	...	10	24	...	1010	712	...	1722

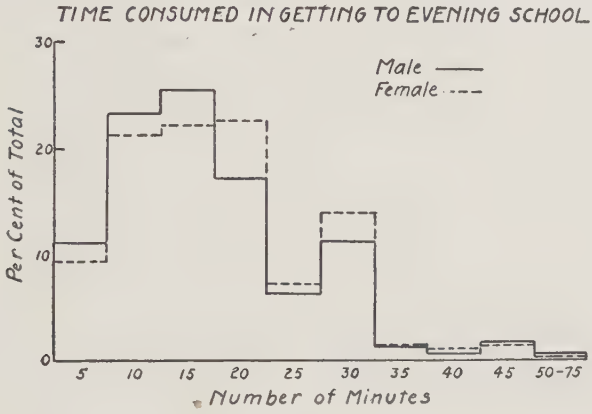
FEMALE

5 and 10.....	9	3	...	84	52	61.8	34	18	65.4	39	26	60.0	145	95	60.4	18	17	51.4	329	211	60.9	540
15 and 20.....	6	6	...	130	103	55.8	33	14	70.2	45	40	52.9	217	179	54.8	16	21	43.2	447	363	55.2	810
25 and 30.....	1	3	...	72	36	66.7	15	4	...	19	16	54.3	107	87	55.2	13	14	48.1	227	160	58.7	387
35 and over....	2	...	...	11	13	45.8	5	...	...	7	1	...	21	22	48.8	5	...	...	51	36	58.6	87
Totals.....	18	12	...	297	204	...	87	36	...	110	83	...	490	383	...	52	52	...	1054	770	...	1824

The 15- and 20-minute category contains all who gave numbers from 13 to 22 inclusive. And so for the others.

Calling attention first to the male group we see that 34.4 per cent are in the 5- and 10-minute group, 43.0 per cent in the 15- and 20-minute division, 17.7 per cent require 25 to 30 minutes, and

Fig. 5



finally 4.9 per cent travel 35 or more minutes in order to get to evening school. Similar percentages for the female group are respectively: 30.0, 43.8, 21.4, and 4.8. These two sets of figures compare rather closely. For the total group the percentages are: 32.1, 43.4, 19.6, and 4.9 respectively.

These figures for the total group show that approximately one-third of all the students get to school in 10 minutes or less, while three-fourths of them are within the 20-minute span. These figures, considered in connection with the fact that 56.3 per cent of the total walk to school, furnish further evidence of the convenience of these schools for the students who attend them.

Fig. 6 shows that in both the male and female groups the time which it takes the pupil to get to evening school does not seem to bear much relationship to persistence. The composite male graph shows that the peak percentage is 61.3 at the 25- and 30-minute mark, and this is followed in succession by 60.4 at 5 and

10 minutes, 56.5 at 15 and 20 minutes, and finally 55.3 at 35 minutes and over. The total female graph shows somewhat different tendencies. Here the top point is 60.9 at the 5- and 10-minute mark, the lowest ratio is 55.2 at the 15- and 20-minute mark; and in between these are the 25 and 30, and the 35 and over groups, at 58.7 and 58.6 respectively. Both curves show low points at the 15- and 20-minute marks; percentages fairly close at the 5 and 10, and 25 and 30 points; with a falling off after that in the case of the males, and the maintenance of the same ordinate in the female graph.

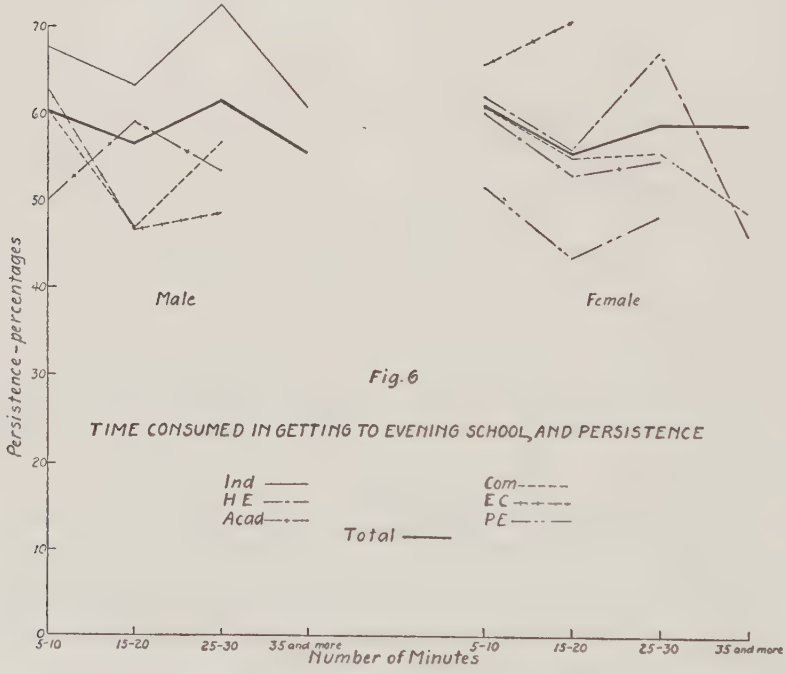


Fig. 6

TIME CONSUMED IN GETTING TO EVENING SCHOOL AND PERSISTENCE

The composite male and female graphs in Fig. 6 have been taken from the statistics in Table XXXIII and include all courses, although each of these has not been completely drawn separately. Thus the male physical education curve has not been presented at all, and the commercial, academic and English and citizenship graphs have not been carried beyond the 25-

and 30-minute mark. In the female graph the industrials have been omitted, the English and citizenship line has been taken only to the 15- and 20-minute mark, and the academic and physical education lines have been stopped at the 25- and 30-minute point. Insufficiency of numbers has been the cause of these omissions in every case.

Two significant facts are brought out by this graph; first that not only in the composite graphs but in nearly every one of the individual course curves, there is a low point at the 15- and 20-minute mark, and second that the persistence-percentage at 25 and 30 minutes is about as high as that at 5 and 10 minutes, and each of these is only slightly better than for those who consume the greatest amount of time in getting to evening school. The explanation of this might lie in the fact, as stated before in the consideration of mode of transportation, that those who require the longest amount of time to get to school comprise a more determined group; and that many of those in the immediate neighborhood and within close walking distance are attracted casually in the beginning of the year, and after a time are not sufficiently interested to continue attendance. The low point at the 15- and 20-minute radius might be due to the presence in this group of the outer fringe of those who walk to school. In the fall, when accompanied by friends this walk of 15 to 20 minutes is apt to be pleasant; but in the cold weather, after some of the friends have dropped out, it takes more determination to continue. Two of the girls who were interviewed stated that they were afraid to walk home alone after school, while others simply said that they didn't like to go alone after their friends had stopped. One girl living at about a 15- to 20-minute walking distance from the school gave as a reason for leaving that she was too tired to walk and couldn't afford to ride.

Whatever the reasons for all this, the figures would seem to indicate that from the standpoint of keeping the students in evening school after they have started, there is little to be gained by having too many evening schools within a short radius; or putting it somewhat differently, if schools are fairly close together it would probably be better to reduce the variety of courses given in each school, so as to increase the offering in the combination of

schools. It must be remembered, however, that these figures deal only with the persistence of those who have started. It might be that many would never start if they could not get what they want at a comparatively short distance.

Hours Put in on Daily Job

To determine the effect of regular hours of work upon persistence the students were asked to give the starting and stopping time of their daily work. This seemed more pertinent and more definite than to have them state the number of hours actually engaged in work.

The statistics are furnished in Table XXXIV and Fig. 7. It will be noted that the groupings on which persistence is compared are as follows: less than 8 hours between starting and stopping time, 8 to less than 10, 10 and over. A more detailed subdivision did not seem advisable because of the scarcity of numbers in some of the groups. 1.5 per cent of the males and 1.0 per cent of the females, who said that their working hours varied, were listed separately; as were also 16.1 per cent of the female group who wrote that they were housewives or engaged in housework.

The highest persistence-percentage for the male students is found in the "8 to less than 10" group. This, on the other hand, is the lowest for the females. The highest for the females is found in the "10 and over" group. When the groups are combined the "less than 8" have the best record, and the "8 to less than 10" the worst. The "10 and over" group are about midway between. It seems that in a general way there is neither a direct nor an inverse relationship between the number of hours on the job and the persistence of the individual in evening school.

It might be worth noting that those who stated that their hours varied had an extremely low percentage of persistence, which is as might be expected. It will be shown later that this is probably a major cause for elimination from evening school.

A return to Table XXXIV shows that 3.1 per cent of the males spend less than eight hours on the job, about three-fourths of them spend less than ten hours, and about one-fourth are engaged for ten hours or more. Working hours for the girls are

TABLE XXXIV

Hours Put in on Daily Job, and Persistence

HOURS	IND.	H. E.	E. C.	ACAD.	COM.	P. E.	TOTALS S.	TOTALS D.	TOTALS P.	TOTALS T.	PER CENT
MALE											
Less than 8	11	.....	5	9	26	.....	27	24	52.9	51	3.1
8 to less than 10	512	.....	108	253	263	24	698	462	60.2	1160	71.3
10 and over	179	.....	79	100	52	6	238	178	57.2	416	25.6
Totals	702	.....	192	362	341	30	963	664	.....	1627	100.0
Vary	8	.....	1	8	7	.....	11	13	45.8	24	.....
FEMALE											
Less than 8	3	13	4	12	69	14	75	40	65.2	115	8.3
8 to less than 10	18	268	35	123	596	74	609	505	54.7	1114	80.8
10 and over	3	53	19	16	58	1	100	50	66.7	150	10.9
Totals	24	334	58	151	723	89	784	595	.....	1379	100.0
Housework or housewife	1	133	57	24	55	10	177	103	63.2	280	.....
Vary	1	7	.....	2	7	1	9	9	50.0	18	.....
TOTAL OF BOTH SEXES											
Less than 8	14	13	9	21	95	14	102	64	61.4	166	5.5
8 to less than 10	530	268	143	376	859	98	1307	967	57.5	2274	75.7
10 and over	182	53	98	116	110	7	338	228	59.7	566	18.8
Totals	726	334	250	513	1064	119	1747	1259	.....	3006	100.0
Housework or housewife	1	133	57	24	55	10	177	103	63.2	280	.....
Vary	9	7	1	10	14	1	20	22	47.6	42	.....

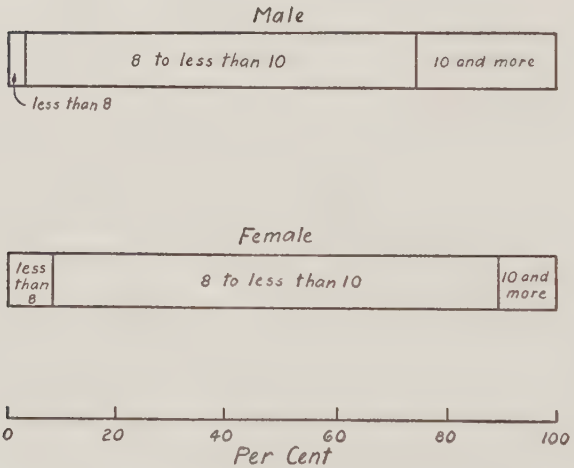
somewhat better: 8.3 per cent record less than eight hours, about nine-tenths spend less than ten hours on the job, and about one-tenth are occupied for ten hours or more.

Prognostication by Students of Effect of Work Upon Attendance —and Persistence

At the beginning of the investigation it was thought that the daily position of the student would prove to be significant from the standpoint of elimination. It was felt too that some might later erroneously attribute their discontinuance to the demands of their daily jobs. As a partial check on this, question 14 was inserted in the questionnaire in order to determine how many of those answering expected their work to interfere subsequently with attendance at evening school. At least this furnished a different angle of approach.

Fig. 7

HOURS SPENT ON DAILY JOB



The statistics obtained here and presented in Table XXXV seem to establish the importance of the daily job as a factor in

attendance, and consequently in persistence. It is undoubtedly true that much of the overtime which developed subsequently came unexpectedly to the student, but it is of some significance that of the 1,756 males and 1,850 females who answered this question, 482 of the former and 359 of the latter said that they expected their work to interfere later with their attendance; while 81 of the first group and 162 of the second stated that they did not know. In every course in both the male and female groups, those who expected to be absent due to work showed a lower persistence-percentage than those who answered "no" to the question. The percentage 47.9 is the same for the former in both the male and female total groups. The percentages of those who did not know are 58.0 for the males and 58.6 for the females. The males who did not expect their work to interfere with evening school attendance have a ratio of 63.1, while the females in the same category register 60.9. These figures furnish no basis for a comparative evaluation of the importance of the daily job as a factor in elimination, but they aid in the establishment of its potency, and substantiate some of the facts obtained later by interview.

Extent of Day School Education

Question 16 of the questionnaire asked the student to name the last grade which he or she had completed in day school. In response to this some gave answers such as 7A, 9A, etc., which in tabulating were taken back to the nearest full year: for example, 7A would be classified as 6, and 10A as 9. Consequently, the educational background of the group as a whole is lower on this account, but not significantly so because only a relatively small number answered in this way. This lowering is also probably offset to some extent by the fact that some gave themselves credit for completing a certain grade, when as a matter of fact they had failed to be promoted from that grade and had not returned to school after the failure. The interviews however, do not disclose much of this; and it might be argued that for the purpose at hand this interpretation of the question is perhaps the more accurate.

In tabulating the answers to this question in Table XXXVI,

TABLE XXXV

Number Who Expected to be Absent Due to Work—and Persistence

	IND.	H. E.	E. C.	ACAD.	COM.	P. E.	TOTALS S.	TOTALS D.	TOTALS P.	TOTALS T.	PER CENT
MALE											
Yes	172	.....	58	126	119	7	231	251	47.9	482	27.4
No	552	.....	141	245	230	25	753	440	63.1	1193	68.0
Don't know	42	.....	3	20	12	4	47	34	58.0	81	4.6
Totals	766	.....	202	391	361	36	1031	725	.....	1756	100.0
FEMALE											
Yes	6	72	26	39	207	9	172	187	47.9	359	19.4
No	20	398	85	137	596	93	810	519	60.9	1329	71.8
Don't know	5	35	12	19	84	7	95	67	58.6	162	8.8
Totals	31	505	123	195	887	109	1077	773	.....	1850	100.0
TOTAL OF BOTH SEXES											
Yes	178	72	84	165	326	16	403	438	47.9	841	23.3
No	572	398	226	382	826	118	1563	959	62.0	2522	69.9
Don't know	47	35	15	39	96	11	142	101	58.4	243	6.8
Totals	797	505	325	586	1248	145	2108	1498	.....	3606	100.0

TABLE XXXVI

Last Grade Completed in Day School, and Persistence in Evening School

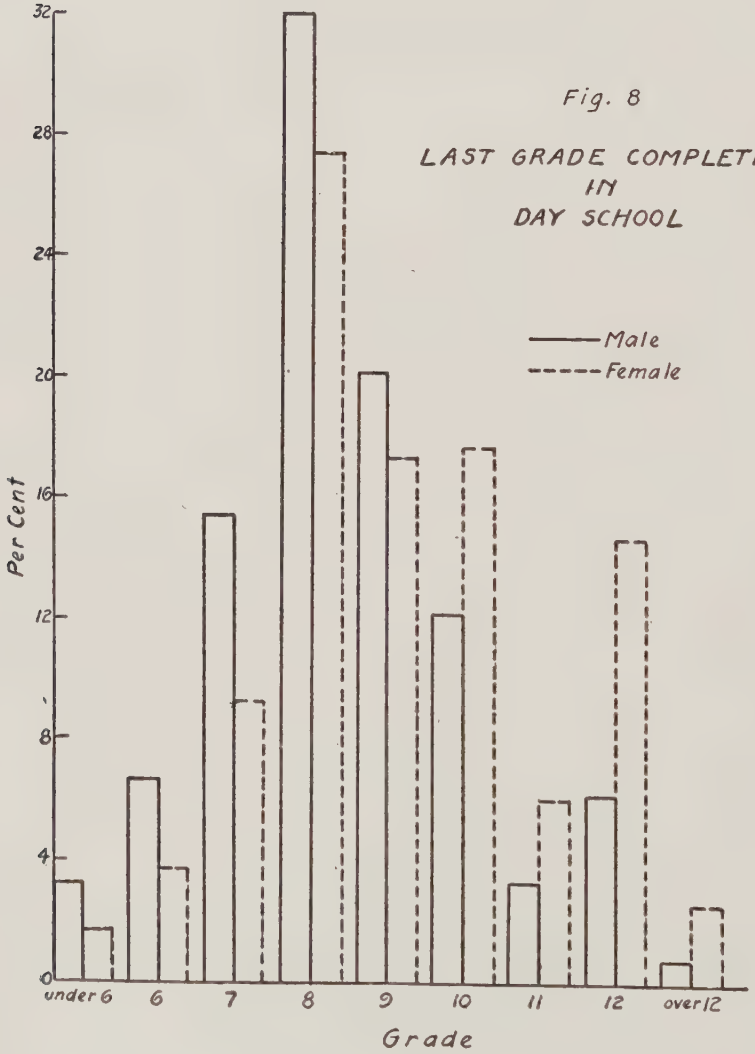
MALE

GRADE	IND S.	IND D.	IND P.	H. E. S.	H. E. D.	H. E. P.	ACAD. S.	ACAD. D.	ACAD. P.	COM. S.	COM. D.	COM. P.	P. E. S.	P. E. D.	P. E. P.	TOTALS S.	TOTALS D.	TOTALS P.	T.	PER CENT
Under 6.....	15	9	...	..	..	..	11	12	...	..	...	...	..	1	..	26	22	...	48	3.2
			68.8						53.2									60.4		
6.....	38	15	...	..	..	..	22	17	...	3	3	...	1	2	..	64	37		101	6.7
7.....	85	46	...	..	..	..	31	33	...	19	7	...	4	9	..	139	95	...	234	15.4
			65.6						55.4			57.9						61.0		
8.....	184	95	...	..	..	..	67	46	...	47	41	...	2	4	..	300	186	...	486	32.0
9.....	101	45	...	..	..	..	32	27	...	54	41	...	1	5	..	188	118	...	306	20.2
			67.9						51.4			52.7						58.7		
10.....	43	23	...	..	..	..	23	25	...	33	37	...	1	..	..	100	85	...	185	12.2
11.....	11	6	...	..	..	..	4	9	...	11	8	...	..	1	..	26	24	...	50	3.3
12.....	11	11	59.5	..	..	..	12	11	46.2	23	23	50.7	1	2	..	47	47	51.3	94	6.2
Over 12.....	3		...	..	..	..	2	1	...	2	4	...	..	..	..	7	5	...	12	0.8
Totals....	491	250					204	181		192	164		10	24		897	619		1516	100.0

FEMALE

GRADE	IND S.	IND D.	IND P.	H. E. S.	H. E. D.	H. E. P.	ACAD. S.	ACAD. D.	ACAD. P.	COM. S.	COM. D.	COM. P.	P. E. S.	P. E. D.	P. E. P.	TOTALS S.	TOTALS D.	TOTALS P.	T.	PER CENT
Under 6.....	..	...	...	13	10	...	..	4	...	..	...	...	..	..	..	13	14	...	27	1.6
						63.2			65.2									62.5		
6.....	..	...	...	23	11	..	15	4	...	3	2	...	1	2	..	42	19	...	61	3.7
7.....	1	...	...	45	44	...	13	11	...	22	14	...	3	..	..	84	69	...	153	9.2
						56.9			61.5			61.2						58.9		
8.....	6	...	...	107	71	..	35	19	...	123	78	...	4	14	..	275	182	...	457	27.3
9.....	3	4	...	29	19	..	18	15	...	119	69	...	6	6	..	175	113	...	288	17.3
						59.8			51.9			55.3						55.0		
10.....	5	3	...	23	16	..	10	11	...	100	108	...	7	11	..	145	149	...	294	17.6
11.....	1	...	...	16	7	..	6	4	...	35	23	...	5	3	..	63	37	...	100	6.0
12.....	2	4	...	22	23	58.9	8	8	53.6	68	73	52.8	22	15	..	122	123	55.0	245	14.7
Over 12.....	1	...	...	5	..	..	1	1	...	18	12	...	4	2	..	29	15	...	44	2.6
Totals..	19	11		283	201		106	77		488	379		52	53		948	721		1669	100.0

English and citizenship classes were not included because it was impossible to evaluate with certainty their day school educations, which were received in foreign countries. But in passing it seems worth noting that their general average was comparatively low,



many of them claiming to have left school at a relatively early age because there were no higher schools available.

A comparison of the female group with the male group on the basis of educational background, and in accordance with the figures of Table XXXVI, indicates a considerable margin of superiority in favor of the former. These figures are depicted graphically in Fig. 8. Thus 17.3 per cent of the female group have completed the twelfth grade or beyond, viz., have secured the equivalent of a high school education or better; 40.9 per cent have completed at least the tenth grade; 58.2 per cent the ninth or beyond; and finally 85.5 per cent have finished the eighth grade or better, thus having at least a grammar school education. The record for the males however, is not as good: 7.0 per cent for the twelfth grade or beyond, 22.5 per cent for at least the tenth grade, 42.7 for the ninth, and finally 74.7 have completed at least the eighth grade. The median of the entire female group is 9.52, and for the males it is 8.77.

The following comparisons of the course groups have been calculated from the statistics in Table XXXVI:

COURSE	MEDIAN	DISTRIBUTION OF MIDDLE 50 PER CENT
Industrial (male)	8.58	7.83 to 9.47
Industrial (female)	10.13	9.16 to 11.25
Home economics (female)	8.74	7.87 to 11.41
Academic (male)	8.59	7.54 to 9.84
Academic (female)	8.83	7.95 to 9.84
Commercial (male)	9.61	8.65 to 10.74
Commercial (female)	10.00	8.87 to 11.16
Physical Education (male)	8.00	7.35 to 9.42
Physical Education (female)	10.92	9.19 to 12.45

Here again attention must be drawn to the fact that the industrial female group and the physical education male group are probably too small to be of significance. In spite of this, however, it is worthwhile to note the tremendous difference in educational background between the physical education females and males, and to a smaller extent that between the industrial females and males.

There is little to choose between the males and females in the academic group, but in the commercial classes the females are definitely superior and rank high in the total list.

From the standpoint of school operation the most significant fact to be gleaned from these figures is that the students in the public evening high schools, as here represented, are in point of previous education about the equivalent of the day school students of the first two years of high school. This would be higher were it not for the fact that the Standard Evening High School of this city takes some of the cream of the public evening high school student body.

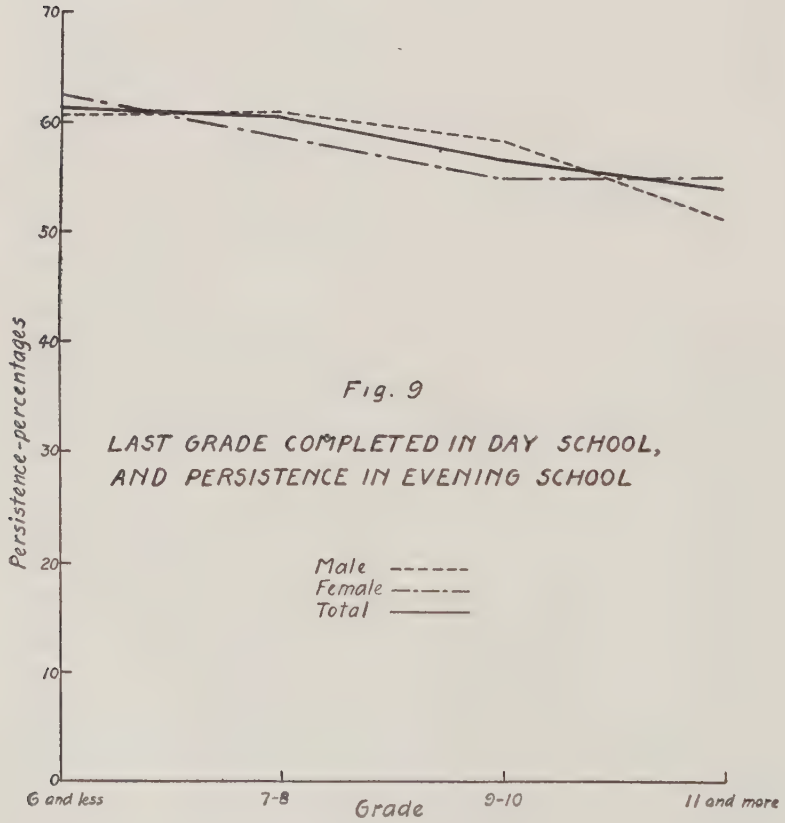


Fig. 9

LAST GRADE COMPLETED IN DAY SCHOOL, AND PERSISTENCE IN EVENING SCHOOL

Extent of Day School Education, and Persistence in Evening School

In Table XXXVI are presented some interesting figures bearing upon the relationship between the extent of day school education and persistence in the evening school. To secure a fair basis for comparison the following groupings have been employed: those who had not gone beyond the sixth grade, those who had completed the seventh or eighth, those who had stopped at the end of the ninth or tenth grade, and finally those who had completed the eleventh grade or had gone beyond. The persistence-percentages for the males and females in each of these four categories are given in the table and show rather definite tendencies. Thus in the case of the males the highest percentage 61.0, is attained by the seventh and eighth grade group, slightly exceeding the 60.4 of the sixth graders. Those of highest educational achievement bring up the rear with a persistence-percentage of only 51.3. In the female group, persistence seems to vary inversely as the grade attained, in a more marked degree than is the case with the males. When the two groups are combined there is an even more perfect example of the same tendency. The percentages for the females, as presented in Table XXXVI, and submitted in order of grade completed, are 62.5, 58.9, 55.0, and 55.0; while those for the entire group are 61.2, 60.5, 56.7, and 53.9. The numbers represented in each of these categories are 237, 1,329, 1,073, and 545 respectively.

Fig. 9 portrays this situation, and Fig. 8 presents a picture of the day school grade attainment of the male and female groups. While it might be accidental that the composite graph in the former chart shows such an unbroken tendency, in the light of the numbers considered and the fact that the same general tendency is manifested by each sex and each course group, there seems little reason to question the results depicted. Whether this condition is due to a more critical or more casual attitude on the part of those who have received a greater amount of preadult education, or to a greater diversity of outside interests, or to a more definite realization of need by those who feel that they have not secured adequate day school training, cannot be determined from the data at hand. However, in interviewing these people the writer noted that many of those of poorer educa-

tion looked upon the evening school as opening the way for further education, while many of the better educated group went merely to brush up on some particular subject or follow some special type of activity for a short time. To them evening school attendance seemed to be more incidental.

One might be tempted to infer from these figures that the evening school work is too elementary for the better educated students. This might be true to some extent, and it is probably the case that the number of students generally who find the work too low in standard, is in excess of the number who find it too difficult. This fact was brought out in the interviews, but the number who committed themselves either way was quite small. Question 25 of the questionnaire attempted to obtain information on this point, but here again those who said that the work was either too difficult or too easy were comparatively few. A more detailed study in this particular direction would probably yield worthwhile results.

The results presented here support only partially the statement from the Buffalo Survey, to the effect that, "Those with a medium amount of training exhibit greater tenacity in their adult education work than do those of either extreme of pre-adult training."[16]

Age-Grade Distribution at the Time of Leaving Day School

Attention is called to Table XXXVII, the information for which has been taken from the returns on questions 15 and 16 of the questionnaire. The ages are given in years at the time of leaving day school, and the grades are given to the nearest half year. It will be noted in the table that the numbers given for the grades 7A, 8A, etc., are much smaller than those given for 7B, 8B, etc. The major reason for this probably is that the latter form more natural stopping places; especially in the cases of the 8B which terminates the grammar school, the 9B which is the last grade of the junior high school, and the 10B which for many marks the end of commercial courses. Another factor might be

[16] Marsh, C. S. (Buffalo Educational Council), *Adult Education in a Community*, p. 113.

that the student felt that only the last yearly grade was desired, or that he or she had received day school training in a school which was not organized on a half-year basis. However, any inaccuracies due to the last named possibility seem to be of little significance.

Median grade attainments for each leaving age are given below, but with the warning that the figures for the 12 and 13 year groups might not be very reliable; not only because the numbers are small but also because they include a high percentage of older students whose educational backgrounds are likely to be somewhat misty. In the calculation of these medians 7A has been considered as 6.5, 8A as 7.5, etc.

AGE OF DISCONTINUANCE	MEDIAN GRADE COMPLETED
12	7.00
13	8.14
14	8.13
15	8.40
16	9.25
17	10.88
18	12.25
19	12.54
20	14.06

If it be considered normal for a child to start school at the age of 6 and progress a grade each year, which would bring him to the end of the eighth grade at about the age of 14; then these medians indicate a normal advance on the part of these evening school students—at least in so far as the medians are concerned. There is an exceptional gap between the medians for the group leaving at the age of 16 and those who stopped at 17; also between the 17 and 18 year medians. The 16 year group as indicated by their median are retarded to some extent. The reason for this probably is to be found in the fact that 16 is the age which marks the end of compulsory schooling in Philadelphia, and as a consequence many day school students leave school at that age regardless of grade attained, except that they must complete the sixth grade according to law. The second large difference might be due to the fact that 18 is the normal age for comple-

TABLE XXXVII

Age-Grade Distribution at Time of Leaving Day School, and Persistence in Evening School

	12			13			14			15			16			17			18			19			20			TOTALS	
	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.	P.	S.	D.
4A and less.	..	..	..	1	..	..	..	..	...	1		...	1		...	1		...	..		...	..	..	..	..	..	..	4	..
4B.....	..	..	..	1	..	..	..	..	...	..	1	...	.		...	1		...	..		...	..	..	..	..	..	..	2	1
5A.....	..	..	..	..	1	..	..	1	...	..		...	1		...	..		...	..		...	..	..	..	..	..	..	1	2
5B.....	1	2	..	1	3	..	2	9	...	1		...	3	2	...	1		...	..		...	..	..	..	..	..	..	9	16
6A.....	..	..	..	..	..	..	1	1	59.2	..		58.5	2		62.4	..		...	..		...	..	..	..	..	..	..	3	1
6B.....	2	2	..	6	..	..	22	9	...	11	6	...	18	5	...	..	1	...	2		...	..	..	..	..	..	..	61	23
7A.....	..	..	..	..	..	..	7	3	...	10	7	...	7	6	...	..		57.0	..		66.1	..	..	..	..	..	..	24	16
7B.....	1	2	..	1	..	..	77	52	...	35	26	...	34	30	...	4	1	...	1		...	..	..	..	..	..	..	153	111
8A.....	..	..	..	..	..	..	23	16		11	9	...	14	7	...	..		...	..		...	..	..	..	..	..	..	48	32
8B.....	2	2	..	14	11	..	158	106	59.8	145	86	62.8	139	82	...	9	10	...	6	1	...	1	..	..	..	..	..	474	298
9A.....	..	..	..	..	..	..	22	8	...	21	16	...	23	14	55.1	3	3	...	..		...	..	..	..	..	..	..	69	41
9B.....	..	..	..	1	1	..	33	22	...	77	36	...	118	101	...	20	12	...	4	3	...	..	..	..	..	..	..	253	175
10A.....	..	..	..	..	..	..	1		...	28	13	...	36	23	...	9	2	...	..		...	1	..	..	..	..	..	75	38
10B.....	..	..	..	1	..	..	4	2	...	21	30	...	106	111	...	33	28	...	14	10	...	4	..	..	1	..	..	184	181
11A.....	..	..	..	..	..	..	..	1	63.8	3		60.7	14	15	51.3	5	8	...	1	2	...	..	..	..	..	..	..	23	26
11B.....	..	..	..	..	..	..	..		...	3	5	...	24	18	...	25	17	...	12	4	...	4	2	..	..	..	..	68	46
12A.....	..	..	..	..	..	..	..		...	..		...	1	1	...	5	3	54.5	1	1	...	..	..	..	1	..	..	8	5
12B.....	..	..	..	..	..	..	..	1	...	3	1	...	15	18	...	48	46	...	54	55	50.9	20	21	..	4	1	..	144	143
over 12B...	..	..	..	..	..	..	..		...	..		...			...	1		...	5	2	...	4	7	..	7	2	..	17	11
Totals....	6	8	..	26	16	..	350	231	...	370	236	...	556	433	...	165	131	...	100	78	...	34	30	..	13	3	..	1620	1166
P.....			57.2				60.2			61.1			56.2			55.7			56.2					58.7					
P.....						60.0							57.7									57.0							

tion of high school. It will be noted however, in the table, that many of the 17-year group have actually been graduated from high school, but not as high a percentage as in the 18-year group. The comparative figures are 95 out of 296 as against 116 out of 178.

These medians demonstrate that there is a direct relationship between the grade completed and the age of leaving day school. Consequently, in the light of the results of Table XXXVI and Fig. 9, we would expect to find a general tendency toward a decrease in persistence-percentage as we go into the higher age levels. A glance along the bottom line of Table XXXVII, in which such percentages are presented for the 12 to 14, 15 to 17, and 18 to 20-year groups, shows that this expectation is realized. The percentages for these combinations are 60.0, 57.7, and 57.0.

In the body of Table XXXVII persistence-percentages for various combinations of grade completion have been computed for each leaving age from 14 to 18 inclusive. For example, at the 14-year age level the percentage for those who have completed the 8B grade is 59.8, for those who have not gone so far 59.2, and for those who have gone beyond the 8B class 63.8. The 15-year group have been tabulated in similar fashion. At the 16-year level however, the 9A and 9B groups have been combined into a single category with a ratio of 55.1, while those below and above have been grouped as before. In the 17 and 18-year columns each has been divided into only two groups because of the small numbers. In a general way these subdivision points have been selected in accordance with the numerical distribution in the column, viz; an effort has been made to subdivide into groups of fair size. If however, significant tendencies manifest themselves, the exact points of such subdivisions should make little difference in the general results.

A study of these percentages is interesting. In the 14-year column the highest persistence-percentage is found in the group of highest educational achievement; in the 15-year column the peak has shifted to the middle group; and for the 16-year students it has gone to those of lowest educational grade, which status is maintained throughout the 17- and 18-year columns. It is of no additional significance that these percentages show a

slight decrease as we move from one column to the next, because as stated before, the ratios for the entire columnar groups show the same tendency to probably a more marked extent. This is indicated by the percentages 60.0, 57.7, and 57.0 at the bottom of Table XXXVII.

These statistics appear to point to the general conclusion that those who advance most rapidly in day school are apt to persist to a greater extent in evening school provided they leave day school at a comparatively early age; but as the leaving age increases, the tendency is for persistence superiority in evening school to shift to those who do not get along so rapidly in day school.

The results here given are probably about what one would expect. We might look for the good student who has not had the advantage of much day school training to manifest a desire for evening school, and on the other hand we might expect the good student who has a sound educational background to find the work of the evening school too slow.

Here again English and citizenship classes have not been included in the tabulation. The reason is the same as that given in the preceding discussion.

Reasons for Leaving Day School

Survey of the field. Within recent years there has been considerable attention directed toward the problem of elimination from pre-adult schools, with the result that several attempts have been made to determine the reasons for discontinuance. In most cases the method has been to ask the student, in interview or by questionnaire, why he or she left school; a procedure obviously open to criticism but not so easily replaced by something more satisfactory.

The following has been extracted from the Buffalo Survey, which included an investigation of 9,544 students who were taking advantage of the educational opportunities offered to adults in that city.

"The more common reasons given by adult students for discontinuing their pre-adult training may be listed in the following order: (1) graduation, (2)

desire to work, (3) economic conditions including finances, (4) need for help at home, (5) dislike for school, (6) sickness, (7) marriage, (8) military service. About one in every fourteen gave some miscellaneous reason which it did not appear wise to classify under the above heads. Among these miscellaneous reasons the more common were: (1) frequent moving of parents, (2) reaching legal age, this reason being especially applicable to females in foreign schools, (3) poor instruction and equipment in the schools, (4) dearth of educational opportunity, (5) inability to read or speak the language of the country in which the individual lived. Polish and Italian women frequently cited custom as influencing their discontinuance. Negro women almost universally gave either the absence of school facilities or the quality of teaching as the reason why they discontinued pre-adult training. The only reason given by negro males was the desire to work, although it seems that in a large majority of cases the real reason was the economic status of the individual or his parents.

Three-quarters of those answering the question, 75.35 per cent, gave one of three answers: graduation, desire to work, or finances. Slightly less than 3 per cent quit because they disliked school, while one-quarter of the total 27.44 per cent quit because they desired to work . . .

As compared to females, men more frequently give the desire to work and finances as the primary reasons for discontinuing pre-adult training. Females give graduation and the many miscellaneous reasons."[17]

Howard Burdge in reporting a study of more than 245,000 16–18-year-old boys in the state of New York, in which over 10,000 interviews were included, presents the following:

"Wanted to work, Financial and Disliked school are relatively small in New York City where Graduated is relatively high. In the other communities of the State where Graduated is relatively small, Wanted to work probably comes nearer to the real reason than any of the others given. It is also a reason which next to Graduation seems 'good' to the boy. He gives this reason with confidence because he thinks that to have a desire to work is commendable. It also seems commendable to 'Want to learn a trade and become self-supporting'. The reasons given under the heading Financial are often real and of course are good reasons in the eyes of society. Sickness is also a plausible reason although given by less than two per cent of the boys in the State. The general impression gained by those who interviewed boys in the shops is that in most cases Wanted to work, Financial, Graduated and

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[17] Marsh, C. S., *op. cit.*, pp. 118–120.

Disliked school could well be classified under the one heading Wanted to quit school to go to work."[18]

TABLE XXXVIII[19]

REASONS FOR LEAVING DAY SCHOOL, ACCORDING TO BURDGE

	WANTED TO WORK	FINANCIAL	GRADUATED	DISLIKED SCHOOL	MISCELLANEOUS	SICK	TOTAL PER CENT
Greater N. Y.....	51.0	10.8	30.8	3.3	3.2	0.9	100.0
Cities over 25,000.....	64.8	13.0	8.4	10.8	1.3	1.7	100.0
Cities under 25,000....	62.4	17.5	2.5	14.6	1.7	2.3	100.0
Villages over 5,000.....	68.8	13.4	2.8	11.6	1.1	2.3	100.0
Places under 5,000.....	72.1	10.1	4.1	10.7	0.5	2.4	100.0
Employed farm boys...	68.7	18.7	2.9	5.9	0.4	3.4	100.0

Evans contributes the following from an unpublished study by Siehl of a vocational evening school in Cincinnati. This particular investigation has been quoted before.

"Only 15 per cent of these students left day school for financial reasons; 67 per cent left because they desired to go to work, to take advantage of a business opportunity, to enter business college, because they had graduated from a particular course, or had lost interest in day school."[20]

Thomas Hopkins in a study of continuation school children in Massachusetts submits a more critical analysis of the reasons for leaving the regular day school.

"The reasons for leaving as reported by the pupils, grouped themselves around four factors. These were (1) economic; (2) being forced out by the school authorities for disciplinary reasons; (3) inability to do the work required in the regular school; (4) desire to go to work. The total number of cases examined was 263, and they were distributed as follows:

[18] Burdge, Howard G., *Our Boys*, p. 117.
[19] Burdge, Howard G., *loc. cit.*
[20] Evans, Owen D., *op. cit.*, pp. 135–137.

TABLE XXXIX

REASONS FOR LEAVING DAY SCHOOL, ACCORDING TO HOPKINS

REASON NO.	BOYS	GIRLS	TOTAL	PERCENT
1.....	2	13	15	6
2.....	8	1	9	4
3.....	72	62	134	50
4.....	50	55	105	40

ANALYSIS OF THE ECONOMIC REASON

"The replies of the two boys and thirteen girls who gave number one, the economic reason, were carefully checked by visits to the homes and consultations with the parents . . . It was the unanimous testimony that, had the children shown any desire to continue in school, they could have done so. All the parents realized the need of an education, but argued that it seemed better for the boys and girls to be on jobs doing things in which they were interested than to be driven to school to do things in which they had no interest."[21]

"It was stated at the beginning of this chapter that the reasons given by pupils for leaving regular school were carefully checked up by all other available sources. With a very few exceptions, all of the 263 cases were doing poor work in the regular school at the time of leaving, and the reports of teachers were to the effect that they were glad to have them drop out. Cumulative school record cards for many were not available, but, on the basis of those at hand, it is safe to estimate that at least 50 per cent of the total number had repeated one or more grades. To what extent this was due to moving from one city to another, sickness, and other causes, there are no data to determine. . . . It would seem that the evidence presented leads to three conclusions: (1) information received from children as to why they left school to go to work is unreliable, and cannot be accepted without careful checking; (2) the two usual reasons, that is, the economic one and genuine desire to go to work, are of little significance; (3) inability to do the work of the regular school is by far the most important factor."[22]

These quotations seem to have contributed confusion to the situation, and because of this it might be well to briefly summarize what has been presented.

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[21] Hopkins, Thomas, *The Intelligence of Continuation School Children in Massachusetts*, p. 95.
[22] *Ibid.*, p. 105.

1. Of the reasons for discontinuance from day school given in these studies, the most important generally is the desire to go to work. In Buffalo this response was submitted by 27.44 per cent of the total; while Burdge, Evans, and Hopkins give 60 to 70 per cent, 67 per cent and 40 per cent respectively.

Next to this in general prominence is the financial reason for elimination, but this ranges from only 6 per cent in the study by Hopkins to 18.7 per cent in one of the sub groups investigated by Burdge. The reliability of these answers is sharply questioned by Hopkins.

Graduation looms important in the Buffalo survey and in the study by Burdge, but since most of the graduation here mentioned refers only to the completion of the elementary school work, and since this represents a comparatively low educational status, it seems that graduation can hardly be termed a reason for leaving school. It is probably a reason for continuance in school to the point where graduation becomes possible.

According to Hopkins inability to do the work of the school is the principal cause for elimination.

2. Hopkins was investigating a group of relatively low educational level, that is, those who had discontinued the regular day school at such early age that the law required them to attend continuation school. On the other hand Evans and Marsh (Buffalo) were reporting on the selected group who find their way to evening school. Burdge studied the rank and file of boys throughout the State of New York. Therefore we would expect differences in results.

3. The work of Hopkins should cause us to look with suspicion upon the information given by children as to why they leave day school. This is borne out to some extent by the investigation at hand. After waiting a sufficient length of time for those who had filled out questionnaires to forget what they had written, 190 additional answers to this question were obtained by interviews conducted by the writer. In only 70 per cent of the cases was the same response given, and this percentage would probably have been lower if answers had not been suggested on the questionnaire. As will be brought out later, those who answered the questionnaire did so apparently with honesty, with the conse-

quence that the comparatively low percentage of verification which the interviews gave for this particular question, may be attributed to the inability of the students to analyze the real reasons for their discontinuance. However, in this connection it might be worthwhile to consider the following:

(a) Discontinuance from school is often the result of an emotional reaction on the part of the student which does not lend itself to objective study. It is evident that such feelings have their beginnings in more tangible conditions, but since these same conditions do not induce similar reactions in other pupils, it cannot be said with certainty that they are more potent than those reasons given by the individuals concerned. Thus if a group of boys and girls who claim to have left school because of desire to work or dislike for school, are found to be of relatively low intelligence, the inference is not clear that this has been the real cause of withdrawal.

In general it seems that intelligence is a factor in school success, but whether it is more effective than any one of several other factors is open to question. The evidence bearing upon this point seems to have been well summed up by A. H. Turney[23] who reports results from more than 100 experiments conducted by various investigators; in which elementary, secondary and college groups are each well represented. Although these findings differ widely his final conclusion is: "The relationship between intelligence as measured by mental tests and achievement as measured by marks is represented usually by a correlation coefficient of about plus .50." Then as a result of his particular investigation with four classes of high school students he adds: "The findings obtained . . . point to the following factors as operating in affecting success in the high school: industry, cooperativeness, perseverance, ambition, and dependability. Each of the traits enumerated here appears to be equal to, or greater than I.Q., in their effect upon achievement as measured by teachers' marks in the University High School."

b. When a pupil honestly gives financial inability as the

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[23] Turney, Austin Henry, *Factors Other Than Intelligence that Affect Success in High School*, pp. 2–12, 120.

reason for discontinuance, it might mean that at that particular time the money which he could earn would be more desirable than the added schooling. In only a few cases does it imply that the family absolutely could not allow the child to continue in school; because the mere fact that they had been able to get along before without the added income would, in most cases, give rise to the presumption that they could continue to do so. In this sense financial inability to continue in school should be interpreted as much in terms of parental attitude as of parental finances. Many parents take their children from school as soon as they are permitted by law, not because they really need the money, but either because they are unwilling to make the necessary sacrifice or because they do not consider the education worth the trouble. Often the children are warned of the event long in advance and this is reflected in their attitude toward the school. Such parents are apt to say that the child could have gone through school if he had really wanted to, or if he had done better work; but they don't add that they tried to get him to want to continue or to do better work in school. In the interviews conducted by the writer the impression has been gained that the answers given by parents are perhaps no more reliable than those given by the pupils.

In addition it must be noted that financial ability can be determined only on the basis of the standards of the family in question, and not by comparison with some other family. Evidences of comfort and luxury in the home are not necessarily indications of the fact that the children would have better opportunity to continue in school than would children coming from homes of poorer appearance—it might point to the opposite.

Keeping in mind the limitations suggested above, the figures of Table XL are presented for what they appear to be worth. Owing to the fact that on some of the questionnaires two or more of the answers to question 17 had been underlined, it was decided in the compilation of the table to give half weight, or 0.5, to each of two answers; and to disregard those papers on which more than two were underlined. The feeling which prompted this was that it was possible for more than one reason to be opera-

tive, but it was deemed unwise and unnecessary to go into greater detail, especially since only a few had made more than two responses. A total of 115 individuals had underlined two responses.

Variations between the results presented in this table and those given by the investigators previously mentioned are not unexpected, in view of the different types of personnel under consideration. For example, this group is of higher educational level than that studied by Hopkins, it is more selective than that reported by Burdge, and it is probably different from the group investigated in Buffalo, because there not only were evening high schools studied but also elementary schools and schools of post high school grade. Differences in results would also arise out of the fact that in this study answers were suggested in the questionnaire.

In Table XL the highest percentage of both males and females claim to have discontinued day school because of financial stress, that in the case of the former being the higher of the two. Second on the list for each group is the desire to go to work, and here again the males have a higher percentage. Of the male group the total percentage for these two answers is 78.9 while for the females it is 69.5. Thus approximately three-fourths of the entire group have given one of these two responses. There is probably little significance in the persistence-percentages which have been calculated separately for each group as classified in the table on the basis of response; but it might be noted in passing that those who left day school because they disliked it show the greatest persistence in evening school. This is followed in turn by those who couldn't see the value of any more day school work, those who couldn't afford to continue, those who didn't get along in day school, and finally by those who wanted to work.

In the group marked "miscellaneous" in Table XL the following answers have each a frequency of at least two:

TABLE XL

Reasons for Leaving Day School, and Persistence in Evening School

REASON	M.	PERCENT	F.	PERCENT	TOTALS S.	D.	P.	T.	PERCENT
Disliked day school	86	6.1	64.5	4.9	97.5	53	64.8	150.5	5.5
Couldn't afford to continue	651.5	46.4	539	40.6	701.5	489	58.9	1190.5	43.6
Wanted to work	457	32.5	383.5	28.9	463.5	377	55.1	840.5	30.8
Didn't get along in day school	69	4.9	22.5	1.7	51.5	40	56.4	91.5	3.4
Couldn't see the value of any more day school work	51.5	3.7	28.5	2.1	48	32	60.0	80	2.9
Miscellaneous	89	6.4	289	21.8	.....	.....	.....	378	13.8
Totals	1,404	100.0	1,327	100.0				2,731	100.0

Male	
Business opportunity	7
Illness	6
Illness in family	5
Went to business school	5
To learn trade	5
Left the country	4
Because of the war	4
Circumstances	4
Had taken wrong course	4
Dropped by school	3
To enlist in army or navy	3
Family trouble	3
Moved	2
Couldn't go any further	2
Still attending day school	2
Help needed at home	2
Death in family	2

Female	
Illness	56
To go to business school	43
Illness in family	35
Needed at home	27
Death in family	16
Moved	7
Still attending day school	5
To help parents	3
Attitude of parents	3
Business opportunity	2
Eye trouble	2
To study music	2

The following groups have been omitted from consideration in Table XL: chemistry classes for nurses, plumbing classes, English and citizenship groups, and finally those who had completed at least the twelfth grade. This last omission has been made because the problem of elimination from day school has altogether different significance in post high school grades from that which prevails in the lower grades. Moreover most of those who had stopped at the end of high school merely wrote "graduated."

Previous Evening School Experience

Table XLI gives information not only concerning the number of years previously completed in evening school, but also tells how many dropped out at least once prior to the year of the study. This table has been compiled from information given in answer to questions 18 and 19 of the questionnaire. Using the industrial male group for purposes of illustration in the reading of the table, one finds 30 who had dropped out before and had never completed a year of evening school; 257 who had not dropped out before and who had never completed a year; and 50 who had not finished a single year, but who did not state whether or not they had ever dropped out before. Opposite 1, 2, 3, 4, 5, and "over 5" years,

the same scheme has been used. Opposite "not marked," immediately below "0" in the first column, are 15 who had dropped out before but who gave no reply as to number of years completed previously, 30 who had not discontinued before but who also failed to answer on number of years completed, and finally 81 who left blanks on both questions. The total of these which is 126, probably belongs with the total 337, opposite 0, because in the interviews it was found that of 41 who had given no reply to number of years previously completed, 40 said that the answer should be "0". Consequently in the calculation of percentages these have been combined, viz., the 59.7 per cent opposite 0 represents the per cent of 337 plus 126 out of the total of 775.

Of 48 individuals who had failed to answer the question as to whether or not they had ever before dropped out of evening school, in the interviews 43 stated that the answer was really "no". Therefore it seems more accurate to include the "not marked" with the "never dropped out," than to disregard the former. On this basis the percentage of absolutely new students in each course has been calculated. The method used can be illustrated by the industrial males of Table XLI in which the 257 and 30 of the "never dropped out" column have been added to the 50 and 81 of the "not marked" column to give a total of 418, which when divided by 775, the total for the industrial male group, gives a percentage of 53.9. Determined in the same manner, the percentages of new students who have had no previous evening school experience, are as follows in the various courses:

COURSE	NEW STUDENTS PER CENT OF TOTAL
Industrial (male)	53.9
Industrial (female)	58.1
Home economics (female)	49.4
English and citizenship (male)	58.6
English and citizenship (female)	73.4
Academic (male)	52.6
Academic (female)	43.8
Commercial (male)	53.0
Commercial (female)	65.2
Physical education (male)	66.7
Physical education (female)	45.5
Total (male)	54.2
Total (female)	57.9

From the percentages given for the total male and female groups it can be seen that more than one-half of the entire group in this study are students who have never had any previous evening school experience. This seems to partially explain the heavy elimination which takes place in the public evening high school, and point to the need, on the part of the school, of definite effort to induce the students to attend for more than one year. In the figures given above it will be noticed that the highest percentage of newcomers (73.4) is to be found in the English and citizenship female group, while the lowest (43.8) is in that of the academic female group.

Returning to Table XLI in which the percentages have been calculated on the basis of number of years previously completed in evening school, regardless of any previous discontinuance on the part of the individual, we note that the English and citizenship female group has the highest percentage (75.8) of those who have not successfully completed any years of evening school work. This is exceptional because, as was pointed out in Tables XXIII and XXIV this group has the highest persistence-percentage of any of the groups, and as we shall see in Table XLII those who have never before completed at least one year of evening school work have a lower persistence record than others who have been more successful. Figure 10 should be examined in connection with Table XLI.

The persistence-percentages in Table XLII are interesting and significant. In the male section they increase from 45.6 in the case of those who have never before completed at least a year of evening school work, but who have previously dropped out; through 54.3 for the absolute newcomers; 56.3 for those who have completed one year but have also dropped out; 60.5 for the group who have completed a year and have not dropped out; 66.7 for those who have completed two or more years and have at some time dropped out; and finally to 72.1 for those who have completed two or more years and have never discontinued. The same sort of progression is to be noted in the female group with the single exception of the 45.1 for those who have completed two or more years but have dropped out. The number (51) represented in this particular group is, however, small. In the column marked

TABLE XLI

Previous Evening School Experience

MALE

MMMMM

No. of years completed	IND.					H. E.					E. C.				
	Dropped out before	Never dropped out	Not marked	T.	Per cent	Dropped out before	Never dropped out	Not marked	T.	Per cent	Dropped out before	Never dropped out	Not marked	T.	Percent
0....	30	257	50	337	59.7	.....	.....	.....	.....	.....	7	55	51	113	64.6
Not marked.	15	30	81	126		.....	.....	.....	.....	.....	5	9	4	18	
1....	38	94	5	137	17.7	.....	.....	.....	.....	.....	9	34	3	46	22.6
2....	21	59	4	84	10.8	.....	.....	.....	.....	.....	4	8	2	14	6.9
3....	9	42	4	55	7.1	.....	.....	.....	.....	.....	1	6	1	8	3.9
4....	4	14	1	19	2.5	.....	.....	.....	.....	.....	.....	3	1	4	2.0
5....	2	8	.....	10	1.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
over 5....	1	6	.....	7	0.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
T....	120	510	145	775	100	.....	.....	.....	.....	.....	26	115	62	203	100

	ACAD.					COM.					P. E.				
0....	18	132	27	177	59.3	20	127	22	169	60.6	2	14	2	18	72.2
Not marked.	9	24	27	60		8	21	24	53		0	5	3	8	
1....	19	39	1	59	14.8	19	44	1	64	17.5	2	4	.....	6	16.7
2....	6	24	.....	30	7.5	10	36	.....	46	12.6	1	.....	.....	1	2.8
3....	7	32	.....	39	9.8	4	17	1	22	6.1	.....	.....	.....	.....	.....
4....	5	12	.....	17	4.3	3	3	1	7	1.9	1	1	.....	2	5.5
5....	1	3	2	6	1.5	.....	2	.....	2	0.5	.....	1	.....	1	2.8
over 5....	3	8	.....	11	2.8	1	2	.....	3	0.8	.....	.....	.....	.....	.....
T....	68	274	57	399	100	65	252	49	366	100	6	25	5	36	100

TABLE XLI—*Continued*

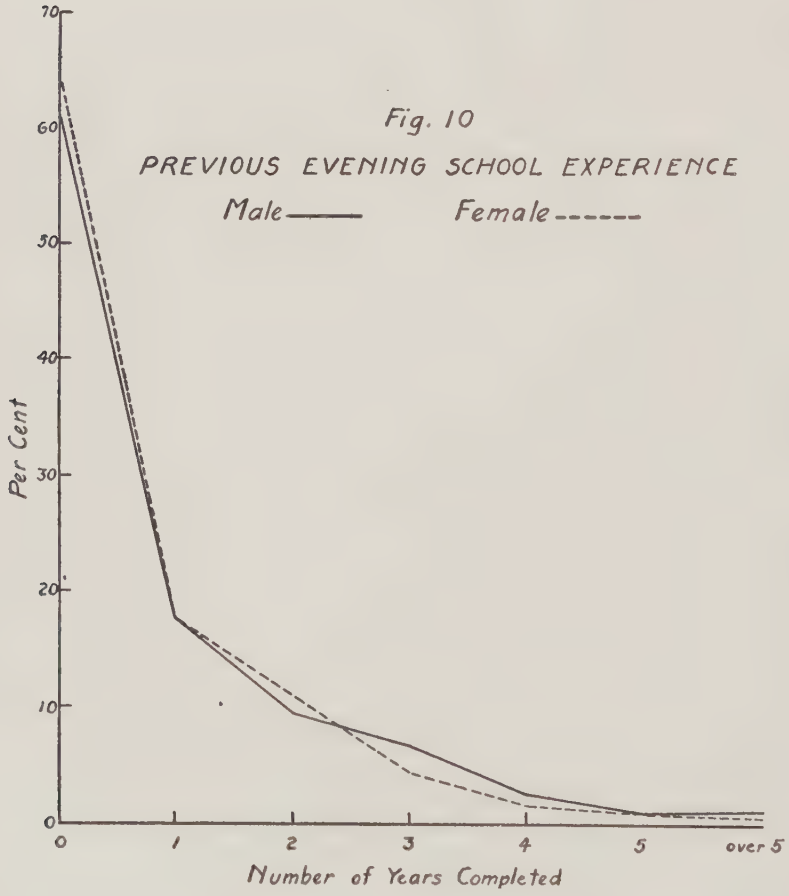
PREVIOUS EVENING SCHOOL EXPERIENCE

FEMALE

NO. OF YEARS COMPLETED	IND.					H. E.					E. C.				
	DROPPED OUT BEFORE	NEVER DROPPED OUT	NOT MARKED	T.	PER CENT	DROPPED OUT BEFORE	NEVER DROPPED OUT	NOT MARKED	T.	PER CENT	DROPPED OUT BEFORE	NEVER DROPPED OUT	NOT MARKED	T.	PER CENT
0....	.....	11	3	14	61.3	8	134	27	169	53.5	2	42	29	73	75.8
Not marked.	1	2	2	5		13	36	57	106		1	12	8	21	
1....	.....	2	.....	2	6.5	12	70	6	88	17.1	4	11	2	17	13.7
2....	.....	8	.....	8	25.8	6	71	3	80	15.6	2	6	2	10	8.1
3....	.....	.....	1	1	3.2	3	28	4	35	6.8	1	.....	.....	1	0.8
4....	.....	.....	.....	.....	.....	1	17	.....	18	3.5	.....	1	.....	1	0.8
5....	.....	1	.....	1	3.2	.....	11	1	12	2.3	1	.....	.....	1	0.8
over 5....	.....	.....	.....	.....	.....	.....	6	.....	6	1.2	.....	.....	.....	.....	.....
T....	1	24	6	31	100	43	373	98	514	100	11	72	41	124	100

	ACAD.					COM.					P. E.				
0....	11	50	9	70	50.7	30	317	101	448	71.1	9	21	6	36	54.6
Not marked.	3	14	15	32		23	56	117	196		1	5	18	24	
1....	6	40	2	48	23.9	24	104	21	149	16.5	5	20	1	26	23.6
2....	6	21	.....	27	13.4	15	49	4	68	7.5	1	11	2	14	12.7
3....	.....	6	3	9	4.5	7	22	4	33	3.6	2	6	.....	8	7.3
4....	2	7	1	10	5.0	2	4	1	7	0.8	.....	1	.....	1	0.9
5....	1	1	.....	2	1.0	.....	3	.....	3	0.3	1	.....	.....	1	0.9
over 5....	0	3	.....	3	1.5	.....	1	1	2	0.2	.....	.....	.....	.....	.....
T...	29	142	30	201	100	101	556	249	906	100	19	64	27	110	100

"P" are to be found the persistence-percentages of the total group of stay-ins to the total group of drop-outs plus stay-ins at various levels of previous evening school success. Thus in the male group these percentages are 53.5 for all those who have not completed any years of evening school work, 59.7 for those who have completed one year, and 70.6 for those who have finished two or more years. Corresponding percentages for the females are 53.5, 62.4, and 71.8 respectively. Thus there are significant increases in persistence as the amount of previous evening school success increases. Fig. 11 shows this situation graphically.



These three columns of persistence-percentages taken from Table XLII seem to point definitely to the fact that in the public evening high school population there is a pronounced cleavage between those who adapt themselves to the work of the school and those who cannot quite get into step. They reaffirm what has been stated before to the effect that, from the standpoint of elimination and also from the standpoint of giving the individual something more worth while, the school should endeavor to effect the return of a larger percentage of those who have previously completed one or more years of evening school work. The differences between the P_1 (a/a+c) and P_2 (b/b+d) columns demonstrate that those who have dropped out before do not persist as well as those who have never dropped out.

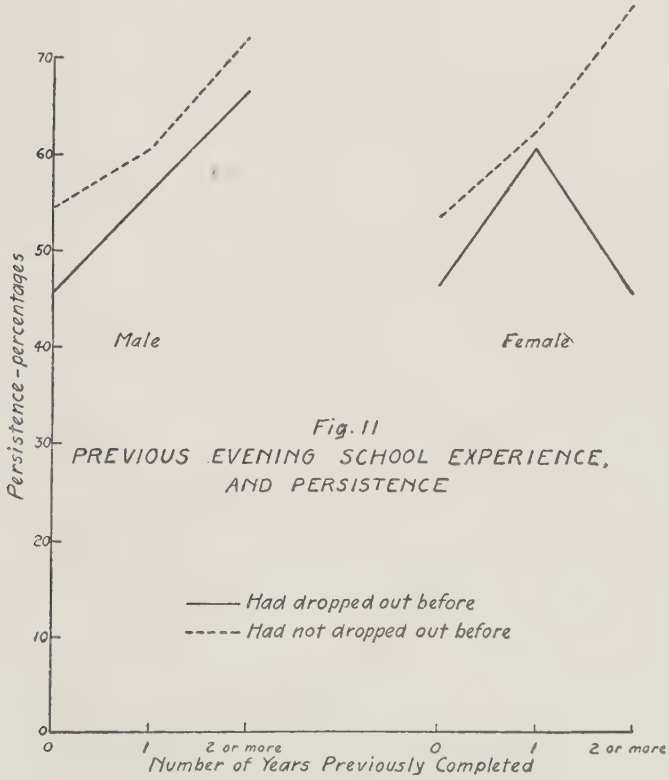


Fig. 11
PREVIOUS EVENING SCHOOL EXPERIENCE, AND PERSISTENCE

TABLE XLII

PREVIOUS EVENING SCHOOL EXPERIENCE, AND PERSISTENCE

MALE

YEARS COMPLETED	S. (a) DROPPED OUT BEFORE	S. (b) NEVER DROPPED OUT	S. NOT MARKED	D. (c) DROPPED OUT BEFORE	D. (d) NEVER DROPPED OUT	D. NOT MARKED	a/a+c p_1	b/b+d p_2	s/d p	a+c t_1	b+d t_2	T	PER CENT
0	36	323	84	41	262	68	45.6	54.3	53.5	77	585	814	60.6
Not marked	16	43	.....	21	46	.....				37	89	126	
1	49	130	7	38	85	3	56.3	60.5	59.7	87	215	312	17.5
2	24	96	5	18	31	1				42	127	175	9.8
3	17	64	2	4	33	4				21	97	124	7.0
4	9	23	3	4	10	.....	66.7	72.1	70.6	13	33	49	2.8
5	3	11	1	.....	3	1				3	14	19	1.1
over 5	3	13	.....	2	3	.....				5	16	21	1.2
T	157	703	102	128	473	77	55.2	59.7	58.7	285	1176	1640	.....
Not marked on either question 18 or 19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	139	.....
Total Male	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1779	100.0

FEMALE

0	27	300	99	33	275	76	46.2	53.7	53.5	60	575	810	63.3
Not marked	20	76	.....	22	49	.....				42	125	167	
1	31	154	21	20	93	11	60.8	62.4	62.4	51	247	330	17.5
2	16	123	8	14	43	3				30	166	207	10.9
3	5	45	11	8	17	1				13	62	87	4.6
4	1	27	1	4	3	1	45.1	75.7	71.8	5	30	37	2.0
5	1	12	1	2	4	.....				3	16	20	1.1
Over 5	.....	8	1	.....	2	.....				.....	10	11	0.6
T	101	745	142	103	486	92	49.2	60.5	59.2	204	1231	1669	.....
Not marked on either question 18 or 19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	217	.....
Total female	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1886	100.0

In calculating the percentages found in the extreme right-hand column of Table XLII the 60.6 per cent of males who had previously never completed as much as one year was obtained by adding 814, 126, and 139, and calculating the percentage on the base 1,779. In similar fashion 63.3 per cent was obtained for the females.

Reasons for Attending Evening School

Survey of the field. Several attempts have been made to determine the reasons for evening school attendance, some of which are here presented.

The first of these, the Buffalo Survey, concerns not only the public evening high schools of Buffalo, but as has been mentioned before embraces also the elementary schools and the evening schools of college grade.

"About one in every twenty people, 4.43 per cent, attends solely for pastime; one in thirty, 3.3 per cent, attends to secure advancement in his own vocation; two out of each one hundred, 1.88 per cent, attend to secure credit toward some degree, diploma, etc.; one in every twelve, 8.4 per cent, gives no reason for attending adult schools; and four out of every five, 81.13 per cent, state they are attending solely for further education. About one in every one hundred people give cultural development, acquisition of new friends, or some miscellaneous reason for attending evening classes."[24]

The next extract deals with extension classes conducted by the University of Minnesota:

"We have been interested at Minnesota in trying to find out why the older group is in school. Thus far we have confined our studies largely to those registered in the extension department. We have asked them to state the reasons why they are studying by correspondence or in extension classes. Roughly speaking, three-fourths of them assign one or the other of two reasons: 'I expect it will help me to advance in my work', or 'It will prepare me for a different job.' In other words, they are trying to keep the road to promotion open, they are trying to increase their adaptability, they hope to get larger salaries. The dominating motive is economic and personal.

"It appears that these motives fluctuate very little with age, although

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[24] Marsh, C. S., *op. cit.*, pp. 137–138.

there is a slightly noticeable and measurable tendency for them to be more powerful in the older age groups. Perhaps that is natural and normal and should be expected under all circumstances.

"While about 78 per cent of our extension students are influenced by personal and economic motives, the remaining 22 per cent are animated by a disinterested desire for intellectual improvement without reference to promotion or salary. While the cases involved—over 2000 in all—may be too few to permit of reliable conclusions, still they do seem to indicate one or two things of very great interest. They show or seem to show that among the younger age groups there is a larger percentage genuinely interested in self-improvement than there is in the groups between the ages of 24 and 50. After 50 the number motivated by unselfish interest in personal growth and improvement increases."[25]

The following concerns the university extension work in Great Britain:

"I think the thing that is hurting our work in England more than anything else just now is that students who are actuated by very different motives, and who come for different purposes, are sometimes all assembled in one class . . .

"So far as I have discovered, there are three main types of purposes that bring workers into our classes.

"First, there are workers who want to make good the opportunities that they missed in infancy and childhood. Often these workers justify a pessimistic view of adult education, because they are trying too late to do what should have been done very much earlier . . .

"The second type of workers who come to our classes are those who have a lively, though perhaps a desultory curiosity. We are now getting many students who have no serious interests . . .

"We are arranging through the unions a great many short courses of six lectures, or twelve lectures, dealing with cultural subjects. We have discovered, too, that although the worker is often a very serious and earnest student of social problems, he also likes recreation.

"In the third place, we are finding serious academic students among the workers in larger numbers than we suspected. For them we are trying to provide something that is really a university education outside of university walls."[26]

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[25] Coffman, L. D., "Why They Study", *Journal of Adult Education* (June, 1930), p. 262.

[26] Wooton, Barbara Frances, "Making Democracy Safe for the World", *Journal of Adult Education* (June, 1930), pp. 286–287.

In a study made at the University of Wisconsin Extension Center in January, 1929, in which 1903 responses were made by students as to why they were taking these courses, the following returns were secured:

TABLE XLIII[27]

REASONS FOR ATTENDING EVENING SCHOOL AT UNIVERSITY OF WISCONSIN EXTENSION CENTER

PURPOSE	NUMBER OF RETURNS	PERCENT
General culture	563	29.6
Degrees	358	18.8
Certificate (vocational)	267	14.0
Promotion in vocation	468	24.6
Transfer to new vocation	224	11.8
Miscellaneous	23	1.2
Totals	1903	100.0

Evans reports a special study of this question made in Buffalo during the school year 1920–1921. The reasons given for attending evening school are tabulated as follows:

TABLE XLIV[28]

REASONS FOR ATTENDING EVENING SCHOOL AT BUFFALO, ACCORDING TO EVANS

	VOCATIONAL HIGH SCHOOL	OTHER HIGH SCHOOLS	ELEMENTARY SCHOOLS	ALL SCHOOLS
To prepare for better positions	62.2%	23.0%	3.8%	20.0%
To prepare for higher institutions	0.0	4.5	0.5	1.4
For general culture	2.7	19.0	6.0	6.5
For self-improvement	27.0	57.0	44.0	45.8
For mastery of English	6.0	2.4	26.1	19.0

[27] "A Survey of Adult Education in Milwaukee". From Clearing House Section of *Journal of Adult Education* (June, 1929), p. 304.

[28] Evans, Owen D., *op. cit.*, pp. 141–147.

As can be seen from the foregoing the reasons for evening school attendance are about as difficult to determine as are the reasons for leaving day school. Students answering in all honesty are often unable to analyze the reason, and it is quite probable that a large percentage of them are actuated by a combination of reasons. One girl told the writer that she liked to go, and she thought it was worth while, and she wanted to be with her friends anyhow. Under the circumstances the best that can be expected from any study is a rough approximation of the real situation. In this particular investigation a verification of only 73.0 per cent was secured by interview.

The outstanding fact which can be gleaned from the authorities quoted is that the reasons for attending evening school classes are significant only in the light of the courses which are being taken. For this reason the data secured in this investigation and tabulated in Table XLV and Fig. 12 have been presented entirely on the basis of courses, with no attempt at totals. In the industrial male group 43.1 per cent stated that they were interested in learning a trade or job as against 25.0 per cent who were concerned with advancement at work. This would seem to indicate that more of these people are trying to qualify for a different position than are seeking to perfect themselves in the position which is now held. This is substantiated by a study of the occupations submitted on the questionnaire by students of the industrial classes. As might be expected a large majority (77.8 per cent) of the home economics group attend evening school to learn something useful in everyday life, but a surprisingly large percentage (13.3) are interested in the work from the standpoint of learning a trade or job. Again as might be expected the desire to improve education looms most important with the academic group, both male and female. The commercials are about evenly divided between those who are seeking to improve their education and those who want advancement at work. The former occupies first place among the males while the reverse is true for the females. Improvement of health is reported as the dominating influence with both male and female students in the physical education classes; but 36.1 per cent of the latter attributed their presence to the pleasure which they expected to get out of it,

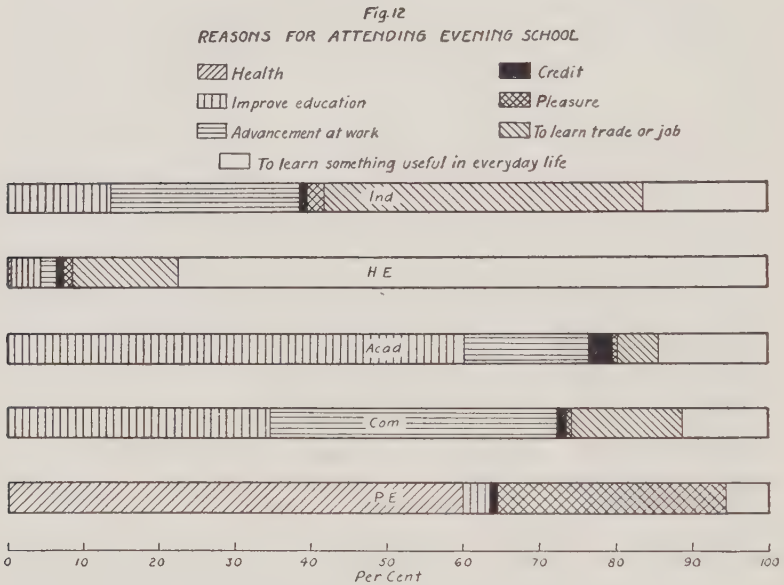
TABLE XLV

Reasons for Attending Evening School

Reasons	Male									
	Ind.		H. E.		Acad.		Com.		P. E.	
	Cases	Per cent	Cases	Per cent	Cases	Per cent	Cases	Per cent	Cases	Per cent
Health	1	0.1	.....	.....	.....	.....	.....	.....	20	66.7
Improve education	90.5	13.0	.....	.....	203	56.9	135	40.3	3	10.0
Advancement at work	174	25.0	.....	.....	73	20.5	107.5	32.1	.....	.....
Credit	5.5	0.7	.....	.....	12	3.4	1.5	0.4	.....	.....
Pleasure	14.5	2.1	.....	.....	2	0.6	1	0.3	3	10.0
To learn a trade or job	300	43.1	.....	.....	20	5.6	27	8.1	.....	.....
Learn something useful	111.5	16.0	.....	.....	47	13.0	63	18.8	4	13.3
Totals	697	100.0	.....	.....	357	100.0	335	100.0	30	100.0
	Female									
Health	.....	.....	1.5	0.3	.....	.....	.....	.....	57	58.8
Improve education	7	24.1	19.5	4.0	120.5	67.4	264.5	31.8	1	1.0
Advancement at work	6	20.7	11	2.2	13	7.3	334	40.2	.....	.....
Credit	.....	.....	3	0.6	3.5	1.9	11	1.3	1	1.0
Pleasure	5.5	19.0	8.5	1.8	3.5	1.9	5	0.6	35	36.1
To learn trade or job	4.5	15.5	63.5	13.3	8.5	4.8	148.5	17.9	.....	.....
Learn something useful	6	20.7	376	77.8	30	16.7	68	8.2	3	3.1
Totals	29	100.0	483	100.0	179	100.0	831	100.0	97	100.0

while only 10.0 per cent of the former were so motivated.

The same system of using half credits for each of two underlined answers has been used here as in the compilation of previous tables.



Adequacy of Subjects for Purposes of Individual

Question 22 of the questionnaire asked each individual whether or not the subjects which were being taken were the proper ones for his or her purpose in coming to evening school. Owing to the fact that the public evening school students for the most part register for what they want and receive little in the way of curriculum guidance, it was felt that many of them were perhaps misplaced from the standpoint of their purposes in attending evening school, and also on the basis of ability. Thus this might be a rather prominent factor in elimination, but of even more importance than any actual misplacement would be the student's reaction to it. Consequently questions 22 to 25 were inserted in the questionnaire in an effort to get the opinion of the individual concerned.

TABLE XLVI

ADEQUACY OF SUBJECTS FOR PURPOSE OF INDIVIDUAL, AND PERSISTENCE

RESPONSE	IND.	H. E.	E. C.	ACAD.	COM.	P. E.	TOTALS				
							S.	D.	P.	T.	PER CENT
Yes	700	452	284	522	1,137	115	1,854	1,316	58.5	3,210	90.5
No	24	5	2	9	24	4	28	34	45.2	68	1.9
Don't know	72	36	5	47	93	15	152	111	57.8	268	7.6
Totals	796	493	291	578	1,254	134	2,034	1,461	.....	3,546	100.0

Of a total of 3,546 students who gave answers to question 22, only 68 stated that they did not consider the subjects proper for their purposes, and 268 said that they did not know. The small numbers represented in these two categories make it unnecessary to consider the male and female groups separately, or even to pay attention to the course groups separately, although the latter has been done in Table XLVI in order to show the distribution of those who answered "no" or "I don't know." It will be noticed in the table that the total of the stay-ins and drop-outs is not 3,546, which is due to the fact that some who answered question 22 could not be classified on this basis.

As might be expected, but with due regard to the small number included, those who answered "no" to the question show the lowest persistence-percentage (45.2) of the three groups. However, those who were not sure had a ratio (57.8) almost as high as that (58.5) of those students who were satisfied with the subjects which they had selected.

Whether these results mean that misplacement as a factor in elimination is relatively unimportant, or whether it indicates a reluctance on the part of the students to voice what seems like criticism of the school, is open to question; but in the interviews the writer found that 90 per cent of those interviewed verified the answers given.

Influence in the Selection of Subjects

Question 23 of the questionnaire asked the students whether they had made their own selections of subjects or had been influenced by advice given in the school or outside the school. The results are presented in Table XLVII.

Of the 3,376 students who answered this question, 2,727 or 80.8 per cent stated that they had selected the subjects themselves, 503 or 14.9 per cent said that somebody outside had caused them to select the subjects which they were taking, and only 146 or 4.3 per cent reported that advice from a teacher or principal had been the motivating influence. This last group however, has the highest persistence-percentage (62.3) by an appreciable margin. Whether this means that the advice was of some help in the decrease of elimination, or that those who sought the advice of

TABLE XLVII

Influence in the Selection of Subjects, and Persistence

RESPONSE	IND.	H. E.	E. C.	ACAD.	COM.	P. E.	TOTALS						
							S.	D.	P.	M.	F.	T.	PER CENT
Individual	609	377	188	422	1,017	114	1,583	1,144	58.0	1,272	1,455	2,727	80.8
Teacher or Principal	29	9	8	60	39	1	91	55	62.3	84	62	146	4.3
Somebody outside	134	81	28	79	166	15	284	219	56.5	289	214	503	14.9
Totals	772	467	224	561	1,222	130	....	....	....	1,645	1,731	3,376	100.0

school officials were of more serious type, is not evident. At any rate it seems that the school could profitably furnish more guidance at registration, but not to the point of hampering the volition of the individual. Nevertheless if a certain previous training or standard of ability appears to be necessary for success in a particular class, this should be definitely established as a minimum requirement to be met by those who seek entrance to that class. These conditions should be generally enforced, but within limits flexibility in application might be permitted, because the type of individual is often more important than his previous training.

In this connection it is interesting to note the viewpoint of Charters.

"Children are generally unable to judge just what they need to know. The public school experts have, on the basis of generations of research and experimentation, gathered what they consider to be the best information to give students, and this information consists of the fundamentals which everybody should learn.

"The situation in adult education is different. The public school system cannot be so sure of itself. The adult is as mature as is the official of the public school system. The adult knows what he wants as well as, or better than, the official knows . . . (speaking of the official, Charters continues) He is likely to have a bureaucratic attitude of superiority, growing out of the idea that because he knows the machinery better than the adult he is equally superior in determining the uses to which the machinery should be put."[29]

The interviews showed 82 per cent verification of the answers to this question on the questionnaire. Of the 41 incorrect responses 24 changed from "I selected them" to "somebody outside advised me," and 11 made the opposite change.

Student's Intention Toward Returning to Evening School the Following Year

Table XLVIII gives the figures which show the student's intention toward returning to evening school the following year, and the relationship between this intention and persistence. Of the 3,562 individuals who were questioned, 2,574 or 72.3 per

[29] Charters, W. W., *Journal of Adult Education* (October, 1930), pp. 374–5

cent stated that they intended to return, 52 or 1.5 per cent gave the opposite response, and 936 or 26.2 per cent replied that they were undecided. The male and female groups when taken separately show little difference except that the latter have a higher percentage who are undecided. It appears that almost three-fourths of the entire group intended to continue their evening school work the following year. The interviews gave 80 per cent verification of these statistics.

These figures suggest a certain amount of satisfaction with the schools attended, because only a very small percentage of those who professed intention of returning to evening school, planned to go to a different school. The results are as follows: of the entire group who answered in the affirmative, 91 males and 19 females, or a total of 110, named some other school; 95 males and 85 females, or a total of 180, did not name any school; 43 males and 11 females, or a total of 54, said that they didn't know; and a total of 13 students stated that they were not certain whether they would return to the same school or attend a higher institution. Practically all of those who named another school mentioned a school of higher grade such as University of Pennsylvania, Temple University, or Drexel Institute. It is probable too that most of those who did not name any school intended to return to the same school. Thus only a very small percentage of the total had no intention of returning to evening school, and practically none intended to enter some other school of the same grade of work.

The persistence-percentages given in Table XLVIII for the different classifications show large differences between those who intended to return (62.6) and those who either did not intend to return (42.3), or who did not know, (46.7). The percentages are about the same for both the male and female groups.

These percentages show, as has been suggested before, the desirability of getting students to attend evening school for more than one year, especially those who profess intention of returning. That a large percentage of the 72.3 per cent recorded in Table XLVIII who say that they will return to evening school, probably will not do so, is indicated by the discussion of Tables XLI and XLII in which it was demonstrated that more than

TABLE XLVIII

STUDENT'S INTENTION TOWARD RETURNING TO EVENING SCHOOL THE FOLLOWING YEAR, AND PERSISTENCE

RESPONSE	IND.	H. E.	E. C.	AC.	COM.	P. E.	TOTAL MALE S.	TOTAL MALE D.	TOTAL MALE P.	TOTAL MALE T.	TOTAL FEMALE S.	TOTAL FEMALE D.	TOTAL FEMALE P.	TOTAL FEMALE T.	TOTALS—BOTH SEXES S.	TOTALS—BOTH SEXES D.	TOTALS—BOTH SEXES P.	TOTALS—BOTH SEXES T.	PER CENT
Yes	633	334	253	428	838	88	844	506	62.5	1350	767	457	62.7	1224	1611	963	62.6	2574	72.3
No	12	8	1	13	18	0	10	16	38.5	26	12	14	46.2	26	22	30	42.3	52	1.5
Undecided	143	156	55	149	384	49	164	206	44.3	370	273	293	48.2	566	437	499	46.7	936	26.2
Totals	788	498	309	590	1240	137	1018	728	...	1746	1052	764	...	1816	2070	1492	...	3562	100.0

one-half of the entire group under consideration had never had any previous evening school experience.

Difficulty of the Evening School Work

Experience with the extreme variations which exist in many of the evening school classes leads one to conclude that probably many of the students discontinue because the work is too difficult for them, while on the other hand perhaps many are influenced to drop out by the fact that the work is of too easy a nature. Thus question 25 of the questionnaire attempted to get the student's reaction on this point, the results of which are tabulated in Table XLIX.

In suggesting the answers: "too difficult," "difficult but not too difficult," "too easy," "easy but not too easy," it would probably have been more satisfactory to have made three gradations instead of the four; because of the apparent confusion in interpretation by the individual, between the second and fourth of these. The interviews verified the answers given on the questionnaire to the extent of only 65 per cent, but of the 76 answers which were not verified by interview, 27 were changed from "easy but not too easy" to "difficult but not too difficult," while 38 were shifted in the opposite direction; showing well balanced interchange both ways. Thus 65 of the total 76 responses, incorrect from the standpoint of verification, involved only these two answers; and since we are concerned chiefly with those who underlined the first and third of the responses suggested on the questionnaire, this checkup may be considered as satisfactory.

As indicated in the table, of the total 3,081 included, only 20 indicated that the work was too difficult for them, and only 71 stated that the work was too easy. Persistence-percentages for these small groups are of scarcely any significance, but it might be interesting to note the comparatively high percentage (64.8) for those who said that the work was too easy. A total of 66 of those answering this question said that the work was "just right" or "O. K." and a separate category labeled "just right" has been included in the table to provide for those individuals.

Here again the students register almost complete satisfaction.

TABLE XLIX

Difficulty of the Evening School Work, and Persistence

Response	Ind.	H. E.	Acad.	Com.	P. E.	Total Male				Total Female				Totals Both Sexes				
						S.	D.	P.	T.	S.	D.	P.	T.	S.	D.	P.	T.	%
Too difficult	10	0	8	1	1	9	7	...	16	1	3	...	4	10	10	...	20	0.7
Difficult but not too difficult	388	120	277	628	36	447	310	59.0	757	391	301	56.5	692	838	611	57.8	1449	47.0
Too easy	21	8	12	24	6	25	17	...	42	21	8	...	29	46	25	64.8	71	2.3
Easy but not too easy	313	321	241	525	75	369	261	58.6	630	481	364	56.9	845	850	625	57.6	1475	47.9
Just right	21	7	18	16	4	30	9	...	39	22	5	...	27	52	14	78.8	66	2.1
Totals	753	456	556	1194	122	880	604	...	1484	916	681	...	1597	1796	1285	...	3081	100.0

Although an extremely high percentage of verification has been secured by interview, insofar as distinctions are concerned between "too difficult" or "too easy" and the other two suggested answers, it is probable that more of those answering the questionnaire found the work too difficult than were willing to admit it. "Hope springs eternal in the human breast," and as some of those interviewed put it, "The work was somewhat hard but not too hard because I could have done it if I had had sufficient time to prepare at home," or "If I had been able to get down to studying." However, the figures given in the table would seem to indicate that a greater number find that the work is too easy than too difficult.

English and citizenship classes have been excluded from consideration because of the apparent unreliability of the answers.

Knowledge Employer Has of Evening School Activity of Student

Questions 26, 26a and 26b were asked in an attempt to determine to what extent the students were attending school with the knowledge of their employers, and the apparent effect of this upon persistence; also the extent to which the employers encouraged or discouraged the students, and its relationship to persistence. The results are tabulated in Tables L, LI, and LII. The interviews showed percentages of verification of 80, 91, and 93 respectively for the answers to these three questions. The first of these percentages seems quite high in view of the possibility that the employer might not have been aware of the student's attendance at evening school at the time the questionnaire was filled out, but might have learned of it between that time and the time of the interview. Of the total 44 incorrect responses, 11 changed from "I don't know" to "no", 12 from "I don't know" to "yes," while 11 changed from "yes" to "no", and 5 from "no" to "yes". In the interviews some of those who were working for large companies said that they were not quite sure whether the questionnaire meant the employer or the immediate boss.

Table L shows that 59.2 per cent of the males and 47.3 per cent of the females were attending evening school with the knowledge of their employers, the figure being 53.6 per cent for

the entire group. Of the total number 26.1 per cent of the employers were not aware of the evening school attendance, while 20.3 per cent of the students did not know whether the employers knew or not.

A study of the persistence-percentages of the male group discloses the fact that those who were attending without their employer's knowledge persisted to a slightly greater extent (59.5) than did those whose employers knew that they were attending (59.3). In the female group the latter lead with a ratio of 59.1, and the former are lowest with 53.3. The percentages for the total group show that those who were attending with the knowledge of the employer have the best record for persistence (59.2), with those second whose employers did not know that they were attending (55.9) and those third who did not know whether or not their employers were aware of their attendance (55.7). These figures show a slight superiority for the first group.

Attitude of Employers Toward Evening School

More than half of the total group failed to state whether or not their employers encouraged their attendance at evening school, and almost two-thirds of them gave no answer to the question of discouragement. The explanation for most of this is that for those who answered question 26 by stating that the employer did not know that they were attending evening school, these subsequent questions were for the most part superfluous; and for those who had already said that the employer encouraged them the last question required no answer. It is probable that those who stated that their employers knew that they were attending evening school, but who failed to give answers to questions 26a and 26b, actually received no encouragement or discouragement. As many of those interviewed put it, "He didn't care".

Statistics having to do with the extent of encouragement are furnished in Table LI. The most striking fact to be gleaned from these figures is that of the total group of 1,682 who gave answers to this question, 1,403 or 83.4 per cent stated that their employers encouraged them to attend evening school. It seems strange

TABLE L

Knowledge Employer Has of Evening School Activity of Student—and Persistence

RESPONSE	IND.	H. E.	E. C.	ACAD.	COM.	P. E.	TOTALS S.	TOTALS D.	TOTALS P.	TOTALS T.	PER CENT
MALE											
Yes	397	.....	107	222	250	21	591	406	59.3	997	59.2
No	176	.....	44	74	61	8	216	147	59.5	363	21.6
Don't know	160	.....	28	73	58	5	178	146	54.9	324	19.2
Totals	733	.....	179	369	369	34	985	699	58.5	1684	100.0
FEMALE											
Yes	15	144	58	80	378	27	415	287	59.1	702	47.3
No	8	157	13	47	214	26	247	218	53.3	465	31.3
Don't know	3	80	11	23	171	31	180	139	56.4	319	21.4
Totals	26	381	82	150	763	84	842	644	56.7	1486	100.0

however, that those who received encouragement had a persistence-percentage of only 58.7, as compared with 62.7 for those who were not so fortunate. The reason for this might be that some of the former were influenced to register in evening school by their employers, while they themselves were somewhat indifferent about it. However, even if true, and it seems to have been the situation of some of those interviewed, it furnishes only a partial explanation of the ratios given above.

These figures perhaps are not to be interpreted as being contributory to the general conclusion that encouragement by the employer is detrimental to the persistence of the evening school student. On the contrary, as indicated by the tenacity exhibited in chemistry classes for nurses, in which the students are required to attend by the hospitals at which they serve; and in the plumbing classes which are actively sponsored by the plumbers' union; the reverse seems actually to be the case. One must be careful to distinguish between active cooperation on the part of the employer and the sort of encouragement which probably most of these people received, in which perhaps the employer merely remarked that it was a good thing to go to evening school. It is not being suggested that young people be coerced into attending evening school through pressure exerted by the employer, but the mere fact that the vast majority of the employers here represented have in some way expressed their approval leads one to believe that it might be possible and perhaps profitable for the evening school to secure their active cooperation. However, this conclusion is by no means obvious, because some of the schools actually operated by industrial plants can boast of no better records in the way of persistence than those of the public evening high schools, except when other concessions are made to those who attend.

In any plan to secure the active cooperation of the employers and labor organizations the school should expect to take the initiative, but that these bodies are willing to work with the evening school is indicated by results from different cities. A survey conducted in Reading, Pa., in 1924, demonstrated that the employers and labor bodies of that city welcomed the opportunity of cooperating with the school. And the following extract from

TABLE LI

Extent of Encouragement Given By Employers, and Persistence

RESPONSE	IND.	H. E.	E. C.	A.	COM.	P. E.	TOTAL MALE				TOTAL FEMALE				TOTALS—BOTH SEXES				
							S.	D.	P.	T.	S.	D.	P.	T.	S.	D.	P.	T.	%
Yes	366	120	113	264	501	39	483	348	58.1	831	340	232	59.4	572	823	580	58.7	1403	83.4
No	74	34	14	48	104	5	103	53	66.2	156	72	51	58.5	123	175	104	62.7	279	16.6
Totals	440	154	127	312	605	44	586	401	59.4	987	412	283	59.3	695	998	684	59.3	1682	100.0

the Buffalo Survey in connection with the vocational evening schools of that city, shows what is being accomplished there along these lines.

"Educational committees of labor unions and employer organizations, both local and national, help to decide what shall be taught, to secure the enrollment, and to promote the regular attendance of apprentice and other employees best qualified to profit by instruction.

"Moreover, numerous industrial executives individually cooperate with the educational administration in seeing to it that successful accomplishment by the employee in the evening school receives appropriate recognition by the employer in the shop.

"In Buffalo, the vocational evening schools not only use the day school plant and to a large extent employ the day school teaching staff, but they also take advantage of day school relationships with employers and to a continually increasing extent serve the day school graduate. With him they do their most effective work, for post-employment education functions best when it is the unbroken continuance of pre-employment education . . .

"In general, employers and labor unions are deeply interested in the work. The cooperation received from these quarters is fundamentally responsible for the growth of the service. This cooperation often takes the form of very active assistance in securing suitable facilities.

"As evidence of the cooperation existing between the employer and the union on the one hand, and the evening public schools on the other, the method of checking school attendance of plasterers' apprentices is interesting. The joint committee of the employers' organizations and the union of plasterers issues an attendance card to each apprentice. The card is punched by the instructor each evening of attendance. It is the apprentice's record of attendance; it is frequently scrutinized by the joint committee, and pressure is put upon the apprentice to keep his record satisfactory."[30]

In Philadelphia similar cooperation exists between the evening school authorities and the plumbers' union, with the result, as has already been noted, that the percentage of attendance in the plumbing classes is inordinately high. Mention has also been made of the chemistry classes for nurses, which are the result of cooperation between the schools and the hospitals.

Turning again to the previously quoted study by Siehl in Cincinnati one finds:

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[30] Marsh, C. S., *op. cit.*, pp. 55–57.

"The interest of employers in the further education of their employees in this group is suggested by the statement that in 40 per cent of the cases the employer knew that the pupil was attending night school, in 14 per cent he requested that they attend, and in 7 per cent he made promise of future promotion if they should attend."[31]

One would expect most employers to be interested in knowing that their employees have the energy and ambition necessary to attend evening school. On the other hand the student might be expected to attend with more enthusiasm when he knows that his efforts are being recognized by the employer. At its best regular evening school attendance requires sacrifice, and if the goal is too far in the future the probability is that the motivation will not be sufficient to keep the spark burning. However, in any scheme which attempts to secure the cooperation of the employer or the labor union, it must be remembered that the public evening school is for the public, and it should not go too far in catering to special interests.

Table LII gives the figures which show the extent of discouragement by employers, and the ratios involved. A total of 1,366 students answered this question, and only 31 or 2.3 per cent stated that their employers discouraged them from attending evening school. This does not give a sufficient number to warrant a comparison of persistence-percentages; but, although the significance is nil, it is interesting to note that these 31 show a higher persistence-percentage than that of the remainder of the group. The significant fact is that such a small percentage answered "Yes" to this question. This supports the conclusion drawn from the preceding table, to the effect that the majority of employers seem to be at least partial to evening school attendance on the part of their employees.

Medium Through Which Evening School Was First Suggested to Student

Before students can be retained in evening school they must first be obtained. Consequently it is of importance to consider

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[31] Evans, Owen D., *op. cit.*, p. 140.

TABLE LII

Discouragement Given By Employers, and Persistence

Response	Total Male				Total Female				Totals-Both Sexes				
	S.	D.	P.	T.	S.	D.	P.	T.	S.	D.	P.	T.	Per Cent
Yes	13	7	.....	20	6	5	.....	11	19	12	61.3	31	2.3
No	469	334	.....	803	308	224	.....	532	777	558	58.2	1335	97.7
Totals	482	341	.....	823	314	229	.....	543	796	570	58.3	1366	100.0

what agencies are most efficacious in securing this result, especially since most of the public school systems devote considerable attention to advertising the evening schools. In fact much of the literature dealing with adult education in general and the public evening schools in particular has stressed ways and means of getting the so-called adult back into school, but not much space has been given to discussion of how to keep him there.

The answers to question 27 of the questionnaire have been tabulated in Table LIII, and pictured in Fig. 13. As in some of the previous tables half credits have been given for each of two underlined answers, and those papers on which more than two responses were underscored have been omitted. A separate entry has been made for those who answered the question, "What first suggested evening school to you" by merely writing "Myself," because this group comprises 16.5 per cent of the total 3,452 who gave answers to the question.

The percentages for the entire group show that almost one-third are influenced by somebody else in the family; more than one-fourth come through friends; and posters, newspapers, day school teachers and employers seem to be comparatively ineffective with percentages of 2.2, 4.7, 6.0, and 6.2, respectively. "Somebody else in the family" usually means the mother or father, and their relative importance in these returns suggests that greater cooperation between the school and the home might be worthwhile. The other agency of almost equal importance is the influence of friends, and subsequently when reasons for leaving school are discussed it will be found that the same medium is also quite prominent in taking students away from the school. The low percentage attributed to day school teachers indicates the lack of cooperation existing between the day school and the evening school. The interviews show that in some day schools pupils who leave are advised to continue their educations in the evening, but this is the exception rather than the rule.

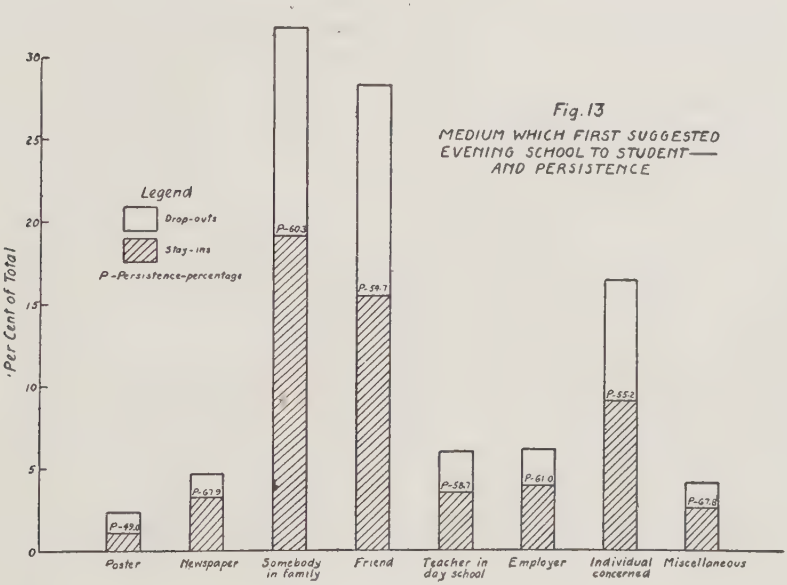
That the employers do not assume a position of greater prominence as an agency in influencing their employees to attend evening school, supports a conclusion previously drawn to the effect that while they favor such activity there is little actual effort expended by them for this purpose. Posters and news-

TABLE LIII

MEDIUM WHICH FIRST SUGGESTED EVENING SCHOOL TO STUDENT, AND PERSISTENCE

MEDIUM	IND.	H. E.	E. C.	ACAD.	COM.	P. E.	TOTAL MALE				TOTAL FEMALE				TOTALS—BOTH SEXES				
							S.	D.	P.	T.	S.	D.	P.	T.	S.	D.	P.	T.	PER CENT
Poster	24	3	5.5	20.5	19.5	2	23.5	27	46.5	50.5	13	11	54.2	24	36.5	38	49.0	74.5	2.2
Newspaper	36	17	51	21	34	4.5	52.5	30.5	63.2	83	58.5	22	72.7	80.5	111	52.5	67.9	163.5	4.7
Somebody in the family	232	151.5	115.5	162	426	13.5	311	207.5	60.0	518.5	352.5	229.5	60.6	582	663.5	437	60.3	1100.5	31.9
Friend	202	204	110	137.5	259.5	68.5	238.5	206.5	53.6	445	298	238.5	55.5	536.5	536.5	445	54.7	981.5	28.4
Teacher in day school	55	13.5	5.5	46	81.5	5.5	72	45	61.5	117	49.5	40.5	55.0	90	121.5	85.5	58.7	207	6.0
Employer	64	4	15	56	71.5	5	102	61.5	62.4	163.5	29.5	22.5	56.7	52	131.5	84	61.0	215.5	6.2
Myself (the individual)	117	63	4.5	105	266	14	147.5	106	58.2	253.5	167	149	52.8	316	314.5	255	55.2	569.5	16.5
Miscellaneous	39	18	10	11	54	8	48	23	67.6	71	47	22	....	69	95	45	....	140	4.1
Totals	769	474	317	559	1212	121	995	707	58.5	1702	1015	735	58.0	1750	2010	1442	58.2	3452	100.0

papers as media for the attraction of evening school students seem to show slight returns, but they serve the purpose of disseminating information to prospective students. It is interesting to contrast these results with those presented in Table XLVII, where it is seen that only a few of the students are influenced in the actual selection of subjects.



The extent of verification obtained on these answers was quite low, only 70 per cent. But of the 64 answers in which changes were made, 14 turned from "somebody in the family" to "friends", or the reverse; and 27 registered changes to or from "myself". Thus the bulk of these incorrect responses are of little significance for the purposes of this investigation.

The persistence-percentages for the total group in Table LIII show that those who received their first suggestion through the newspaper have the best record with a ratio of 67.9. The worst record (49.0) is that of those who were influenced in their registration by posters. Those who were influenced by friends also have a relatively low persistence ratio (54.7).

Under the heading "Miscellaneous" in Table LIII have been grouped such responses as: "Heard about it over the radio", "Heard about it in the shop", "Had the subject in day school", "Desire to study art", "Wanted to learn to sew", etc. Most of these give a reason for coming to evening school rather than the medium which first suggested the school.

Here again attention is directed to the report of the Buffalo Educational Council.

> "Friends are the most important medium of contact between the institution and the individual. The degree of importance which should be attached to the several methods of getting the adult and the school together is, obviously conditioned by the interests and the background of the individual. A medium effective between factory employees and the adult school might be different from one effective between housewives and the adult school and both probably different from the medium which would be effective between business men and evening school. This consideration it seems might be given more weight in planning some of the publicity programs, at least when judged in the light of evidence given by those who actually attend the evening school . . .
>
> "In general, those learning of the evening school through the press, posters and miscellaneous channels enjoy a higher economic status than those learning about the opportunities for adult education through the day schools or through friends."[32]

According to Friese: "It should be kept in mind always that satisfied pupils are one of the best advertising assets an evening school can possess."[33]

The Desire for Homework

The results given in Table LIV have been compiled from information secured through question 28 of the questionnaire, in which the students were asked to state whether or not they desired homework to do over the week-ends. The question was put in this way because the Monday, Tuesday, Wednesday schedule which the schools follow preclude the possibility, in most cases, of having homework done except at the end of the

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[32] Marsh, C. S., *op. cit.*, p. 142.
[33] Friese, John F., *op. cit.*, p. 43.

week. The purposes of the question were: first, to determine to what extent homework is desired in different courses; and second, to note the apparent effect of this desire upon persistence. In addition to the customary omissions, the entire English and citizenship, and physical education groups have been excluded from consideration; because of the apparent unreliability of the answers of the former, and because the question had no meaning for the latter group. A 77 per cent verification was secured on these answers by the interviews, and of the 45 incorrect responses 24 changed from "yes" to "no" and 20 replaced "no" by "yes", showing that these so-called inaccuracies would not tend to shift the percentages materially in either direction.

In Table LIV it is shown that 44.8 per cent of the male group answered "Yes" to 54.7 per cent who gave "No". For the females the figures are 40.8 and 58.7 respectively, indicating that a slightly greater percentage of males than of females desired homework. Percentages for the entire group, listed in the same order, are 42.8 and 56.7 In each case 0.5 per cent simply wrote "Indifferent" or that it didn't matter. Thus almost half of the entire number of students desired homework, but these figures have more significance when the courses are considered separately. For example, in all courses except the academic the "noes" have it, but there it is found that 303 out of 555, or 54.6 per cent, are in favor of homework.

It seems that where possible evening school students should be given outside assignments to enable them to progress more rapidly. On this point one girl who was interviewed appeared to have a legitimate complaint when she asked, "How could we learn shorthand when we weren't given anything to practice on outside of class?" On the other hand one must remember that not all of those students who indicated a lack of desire for homework did so because of indifference, but in many cases because they didn't have the time. For example some of them had to work certain evenings each week, and only by arranging with the employer to work extra time during the latter part of the week were they able to attend evening school at all. Others had outside obligations of various types which made the doing of homework almost impossible. For this reason the teacher per-

TABLE LIV

Desire for Homework—and Persistence

MALE

RESPONSE	IND.				H. E.				ACAD.				COM.				TOTALS				
	S.	D.	T.	PER CENT	S.	D.	T.	PER CENT	S.	D.	T.	PER CENT	S.	D.	T.	PER CENT	S.	D.	P.	T.	PER CENT
Yes	208	97	305	42.7	...	...	...	....	128	81	209	55.3	78	54	132	37.6	414	232	64.1	646	44.8
No	258	149	407	57.0	...	...	...	....	72	96	168	44.4	107	108	215	61.3	437	353	55.3	790	54.7
Indifferent	2	...	2	0.3	...	...	...	....	...	1	1	0.3	4	...	4	1.1	6	1	..	7	0.5
Totals	468	246	714	100.0	...	...	...	....	200	178	378	100.0	189	162	351	100.0	857	586	...	1443	100.0

FEMALE

Yes	6	2	8	33.3	96	56	152	38.0	63	31	94	53.1	191	143	334	39.8	356	232	60.5	588	40.8
No	12	4	16	66.7	129	116	245	61.3	36	47	83	46.9	275	225	500	59.7	452	392	53.5	844	58.7
Indifferent	...	...	...	....	3	...	3	0.7	...	...	...	....	4	...	4	0.5	7	...	...	7	0.5
Totals	18	6	24	100.0	228	172	400	100.0	99	78	177	100.0	470	368	838	100.0	815	624	...	1439	100.0

haps should not insist upon the completion of a set assignment of homework each week, but those who can and want to do it should certainly be given the opportunity.

The persistence-percentages for the two groups are quite different, but both the males and females show the same tendencies to about the same degree. The percentage for the total "yes" group is 61.6 as against 54.4 for the total "no" group. In all courses the former show definite superiority. This might indicate that the former have a better attitude toward the work of the evening school; or it might mean that the same outside factors, such as overtime at work, which made the latter vote against homework, also caused their subsequent elimination.

On the question of home study in the evening school Evans has the following to contribute:

"The general lack of home study on the part of pupils is another handicap. Some of this lack is unavoidable because the time and energy of the pupils are limited. Usually attempts to obtain home study stop with the assignment of a small amount of work on the last session of the week to be done over the week-end. The writer has found only one system, that of Boston, in which home lessons are a definite requirement for evening school credits; here in most of the general courses a printed sheet is issued containing assignments for each week-end. The general practice in most systems, however, is either to make no assignment at all or to give assignments which are not rigorously required."[34]

The Desire for Tests

Table LV gives the tabulation of results which were secured in answer to question 29 of the questionnaire, in which the students were asked to state whether or not they desired tests on the work as they went along. Here again the purpose of the question was twofold; to determine for the use of the teacher, to what extent tests were desired, and also to compare the "yes" and "no" groups on the basis of persistence. As in the preceding discussion and table, the English and citizenship, and physical education groups have been eliminated, and for the same reasons as before. The percentage of verification as de-

[34] Evans, Owen D., *op. cit.*

termined by interview, was 76; and of the 46 incorrect answers 32 replaced "no" by "yes" and 10 gave "no" instead of "yes". This would suggest that a subsequent questioning of the entire group might show a higher percentage of affirmatives.

Of the male group 75.6 per cent said that they wanted to have tests as against 23.8 per cent who decided the other way. The percentages for the females were 64.2 and 35.5 respectively, and for the entire group 70.0 and 29.5. These figures show that by far the great majority of the students desire to be tested on the progress which they are making, an attitude which should be encouraging to those engaged in evening school work. If the home economics group were eliminated from consideration on this point, and it is possible that they should be, the differences would be even more pronounced. For example the total academic group shows a ratio of about four and one-half to one in favor of tests, and in the commercial classes the ratio is almost three to one. In the interviews many of the students stated that they couldn't see any real need for home work but they certainly thought that they should be tested from time to time.

Good teaching demands testing, and the student who is serious about learning finds considerably more satisfaction in the opportunity which tests furnish for him to gauge his progress, than in just going ahead with no check on the work. In addition the apparent laxity of the latter method is apt to induce a similar reaction on the part of the student, not only in the matter of work but also in that of attendance. It seems therefore not only that the classroom teacher should test the members of the class at intervals, but in the evening school particular attention should be given to the construction of tests.

This position is supported to some extent by the following from Friese:

> "Testing the results of evening education is very important. It is likewise difficult. The school and pupils are such that day-school tests are frequently unsatisfactory. Usually tests cannot be forced upon voluntary pupils. There is grave danger that the knowledge that tests are required would prevent some from enrolling and drive others away before courses were completed. Standardized achievement tests in some academic subjects are applicable, but for diagnostic purposes rather than as a test of accomplishment.

TABLE LV

Desire for Tests—and Persistence

MALE

RESPONSE	IND. S.	IND. D.	IND. T.	IND. PER CENT	H. E. S.	H. E. D.	H. E. T.	H. E. PER CENT	ACAD. S.	ACAD. D.	ACAD. T.	ACAD. PER CENT	COM. S.	COM. D.	COM. T.	COM. PER CENT	TOTALS S.	TOTALS D.	TOTALS P.	TOTALS T.	TOTALS PER CENT
Yes	338	163	501	70.6	...	...	...	....	167	146	313	83.5	146	133	279	77.1	651	442	59.6	1093	75.6
No	129	76	205	29.0	...	...	...	....	34	27	61	16.2	41	37	78	21.5	204	140	59.3	344	23.8
Indifferent	3	...	3	0.4	...	...	...	....	...	1	1	0.3	3	2	5	1.4	6	3	...	9	0.6
Totals	470	239	709	100.0	...	...	...	....	201	174	375	100.0	190	172	362	100.0	861	585	59.5	1446	100.0

FEMALE

Yes	5	5	10	40.0	106	52	158	41.4	81	51	132	78.1	346	253	599	72.8	538	361	59.8	899	64.2
No	12	3	15	60.0	118	103	221	57.8	19	18	37	21.9	112	111	223	27.1	261	235	52.6	496	35.5
Indifferent	...	...	...	....	...	3	3	0.8	...	...	...	....	1	...	1	0.1	1	3	...	4	0.3
Totals	17	8	25	100.0	224	158	382	100.0	100	69	169	100.0	459	364	823	100.0	800	599	57.2	1399	100.0

"In classes and subjects pursued for elementary grade or high school credit and a subsequent certificate, the question of testing the results of the instruction is simple and plain. Established standards must be attained. For all other classes—and they exist in great number and variety—the question of testing evening school results is as much a problem for study as vocational and educational guidance, and organization of courses of study."[35]

Reasons for Absence

Question 30 was included in the questionnaire because of the connection which exists between absence and elimination. In presenting this question an effort was made to include in the suggested answers all possible major reasons for absence, and the low number of additional responses which were written in indicates either that this had been accomplished or that a considerable number of the students followed the line of least resistance.

The results are given in Table LVI and Fig. 14. In the tabulation every answer was recorded, except in the few cases in which the answers seemed to be unreliable. Thus the number of entries does not agree with the number of individuals considered.

There were 142 instances of additional answers being written in on the questionnaire, and these have been classified under the term "miscellaneous". They are distributed as follows:

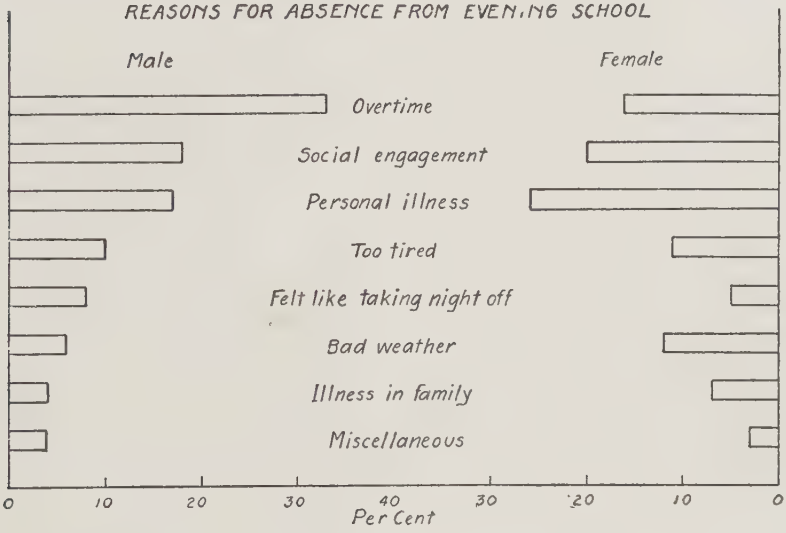
reasons connected with daily work	20
deaths, funerals, and marriages	19
church obligations	16
traveling or away from home	16
meetings—scouts, lodges, national guard, etc.	16
other schools or lessons for other schools	12
home duties	11
holidays (Jewish)	10
thought Armistice Day was a holiday	8
	128

The remainder are scattered among such reasons as: appointments with dentists, entertaining visitors at home, jury service, automobile out of repair, needed glasses, trouble over birth certificate, missed train or bus, disgusted, had no material with which to work, would rather be absent than go in late.

[35] Friese, John F., *op. cit.*, p. 162.

Table LVI shows that among the males approximately one-third of the absences are due to the daily position; one-fifth to personal illness or illness in the family; and about two-fifths to causes which in a majority of cases imply a certain amount of inertia on the part of the student; bad weather, social engagement, too tired, and felt like taking the night off.

Fig. 14



On the other hand one-third of the female absences are caused by personal illness or illness in the family; one-sixth by overtime; and almost one-half by bad weather, etc., as listed above.

It is probable that the percentages given in Table LVI would vary somewhat throughout different periods of the evening school year, but a radical change in the relative importance of the reasons for absence here presented, would hardly be expected. It will be seen later when causes of elimination are discussed, that with the exception of temporary conditions such as bad weather and felt like taking a night off, all of these reasons are prominent in discontinuance.

TABLE LVI

Reasons for Absence

REASON	MALE							
	IND.	H. E.	E. C.	ACAD.	COM.	P. E.	T.	PER CENT
Personal illness	149	...	28	73	62	7	319	17
Illness in family	42	...	6	13	14	1	76	4
Bad weather	52	...	10	24	31	4	121	6
Social engagement	129	...	21	88	100	3	341	18
Too tired	62	...	23	52	37	7	181	10
Felt like night off	55	...	10	33	43	4	145	8
Overtime	248	...	65	147	136	10	606	33
Miscellaneous	37	...	4	13	18	1	73	4
Totals	774	...	167	443	441	37	1862	100
	FEMALE							
Personal illness	4	143	24	64	279	28	542	26
Illness in family	4	46	14	16	57	6	143	7
Bad weather	4	81	10	23	128	8	254	12
Social engagement	12	85	13	52	254	15	431	20
Too tired	5	46	14	28	140	9	242	11
Felt like night off	1	19	2	8	56	12	98	5
Overtime	9	63	21	41	192	12	338	16
Miscellaneous	2	19	5	8	35	..	69	3
Totals	41	502	103	240	1,141	90	2117	100

VI

Intelligence and Persistence

Some consideration has already been given to the possibility of elimination due to the inability of the student to do the work of the evening school. The questionnaire furnished a chrono-.ogical age-grade distribution of the entire group at the time of leaving day school, which might or might not be a better measure for determining ability to do the work of the evening school, than would be obtained by a study of sheer intelligence. However, since intelligence as such loomed as a possible factor in elimination from night school, it was decided to make a special investigation covering this; but because of the variations in background, training and age among the evening school group it did not seem wise to administer intelligence tests to them. The application of such tests might also have had a disastrous effect upon the subsequent attendance of these people. According to Friese:

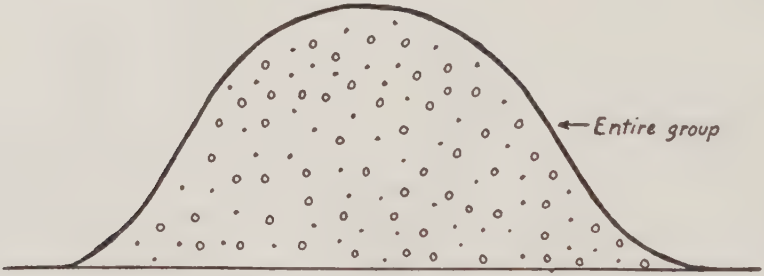
"Many evening school classes present the problem of individual differences in a very marked degree . . . Adults, because of age and experience, apparently vary more than young people. In almost any class the variety of individual differences is greater than is found in day-school classes, either in the grades or in the high school."[1]

Accordingly all of the 15 to 18-year old pupils were separated out from the entire group considered in this study. Then the files of the Bureau of Compulsory Education of Philadelphia were examined for each individual and in about 600 cases it was possible to secure the names of the day schools attended by these people. These files were accurate but not complete as to numbers. Then at the Bureau of Research in Philadelphia it was possible to secure intelligence ratings for 339 of the 600 cases. These intelligence scores had been found according to the Philadelphia Group Intelligence Test which correlates well with the

[1] Friese, John F., *op. cit.*, p. 91.

Otis and Terman Tests (plus 85.3 and plus 82.6 respectively).[2] From the standpoint of educational status, these 339 cases were representative of 98 per cent of the entire group, namely those who had finished at least the sixth year of day school. Most of the tests had been given in the sixth grade of the day school but a few had been administered in the eighth grade. It is probable that intelligence quotients secured at this time in the lives of boys and girls are more accurate than those obtained a few years later, after different experiences have had opportunity to operate.

Of the 339 intelligence quotients which were obtained, 196 of them were of pupils who had not dropped out of evening schools during the year, while the other 143 represented drop-outs. This gives a ratio of 196 to 143, or 1.37 for the sample; the ratio of stay-ins to drop-outs for the entire group being 1.38. This agreement of the ratios seems to illustrate either that intelligence is not a factor in elimination, or if it is these cases provide an adequate sample from which to draw conclusions.



HYPOTHETICAL I.Q. DISTRIBUTION

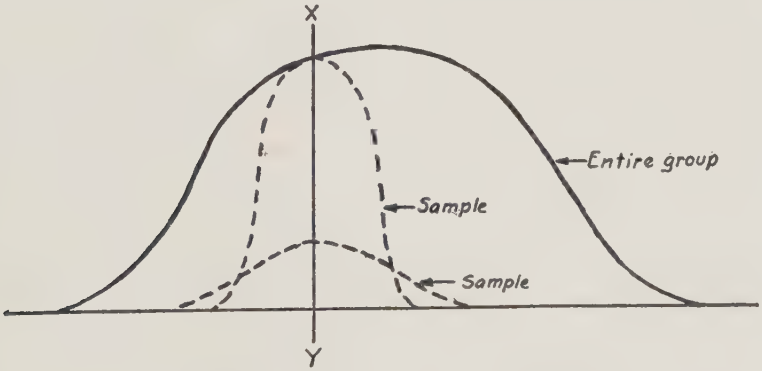
Fig. 15

If the first assumption is the true one, it means that wherever the sample was taken the probability would have been that the stay-ins and drop-outs would have been present in about the same ratio as in the entire group. This is illustrated by Fig. 15, in

[2] Cheyney, W. Walker, *Rate of Progress and the I. Q.*, Ph.D. Thesis, University of Pennsylvania (1930), p. 27.

which the dots represent those who persisted, and the circles those who dropped out during the year. If the scattering of the two is purely random along the intelligence distribution of the entire group, any selection therefrom should contain stay-ins and drop-outs in about the same ratio as is found in the entire group.

If on the other hand there is a definite relationship between intelligence and persistence it can be illustrated by Fig. 16 that the sample is sufficiently representative for a study of this. Assume for example the extreme case in which all those of low intelligence drop out and all those of the higher level continue. That is, all those to the left of the line X-Y are drop-outs and all to the right are stay-ins.



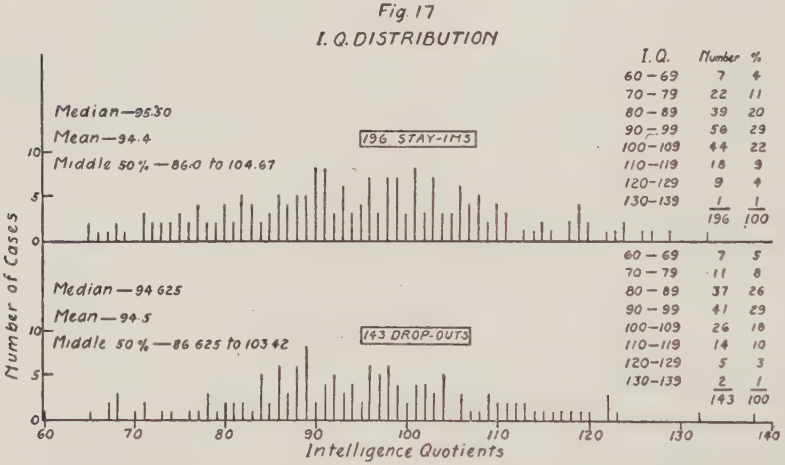
HYPOTHETICAL I. Q. DISTRIBUTION

Fig. 16

Since the ratio of the stay-ins to drop-outs in the sample is about the same as for the entire group, and the sample itself approximates normal distribution, it seems logical to conclude that the sample has an intelligence distribution such as is shown by one of the dotted lines in Fig. 16, or perhaps some compromise between the two. Thus the curve might lose partially in both height and range, rather than taking the total loss in just one of these characteristics. However, since the I. Q. distribution of the sample is from 60 to 138, the loss in range is probably slight, (see

Fig. 17). In any case it is a distribution which takes equal percentages from each side of the line X-Y, and appears to eliminate any possibility of undue weighting in the factors under observation: intelligence and persistence.

An actual comparison of the intelligence quotients of the 196 stay-ins and 143 drop-outs indicates that the former assumption is probably the true one; that is, that intelligence is not related to persistence.



I.Q.	Number	%
60 – 69	7	4
70 – 79	22	11
80 – 89	39	20
90 – 99	58	29
100 – 109	44	22
110 – 119	18	9
120 – 129	9	4
130 – 139	1	1
	196	100

60 – 69	7	5
70 – 79	11	8
80 – 89	37	26
90 – 99	41	29
100 – 109	26	18
110 – 119	14	10
120 – 129	5	3
130 – 139	2	1
	143	100

There is still the possibility that those at the high and low ends of the intelligence distribution might drop out more frequently or less frequently than those in between, without affecting the ratio of stay-ins to drop-outs. Figure 17 seems to dissipate this possibility. It will be noted that the graph of the stay-ins and that of the drop-outs are in almost complete agreement. The medians are 95.50 and 94.625 respectively, the means 94.4 and 94.5, and the distribution of the middle fifty per cent is from 86.0 to 104.67 for the stay-ins and from 86.625 to 103.42 for the drop-outs.

These findings are in agreement with the results of an investigation by E. L. Thorndike in New York City. The purpose of his study was to measure the interrelationships existing between intelligence, achievement, amount of time devoted to home study,

and attendance of evening high school pupils. Although interest here is principally in the effect of intelligence upon attendance, the other results which Dr. Thorndike obtained are too important to overlook, particularly in the light of the numbers involved and the apparent care with which the study was made. The group tested consisted of 886 pupils in two large public evening high schools in New York City. Each of the group was taking one or more of the following subjects: algebra, biology, civics, English (first year), German, Latin and Spanish. Achievement tests were used in each of these subjects and the C. A. V. D. Intelligence Examination was administered to each student.

As the result of this investigation the following conclusions were drawn: "THE INTERCORRELATIONS OF INTELLIGENCE SCORES, ATTENDANCE, AND HOME STUDY ARE ALL APPROXIMATELY ZERO, AND THE CORRELATIONS OF ACHIEVEMENT WITH THEM ARE VERY LOW AND AVERAGE APPROXIMATELY ZERO."[3]

In this connection it might be well to quote also from Thompson who reports a study of ability vs. persistence of Americanization students in the public evening schools of Boston and New York.

"In this investigation tests were given at the beginning and at the end of the inquiry. In New York the interval from the first to the second was one month, or twelve lesson periods. In Boston the interval was shorter—twenty-one days, or ten lesson periods. Yet in the short interval, if the figures for the two cities are combined, more than 40 per cent of those present for the first test were not present for the second, while of those who took the second test 20 per cent were new students . . .

"Many of these withdrawals are for legitimate reasons, and a comparison of the average scores made by those who leave with the average scores of those who stay does not yield any very clear indication in regard to the type of pupil who withdraws. The scores of these pupils in relation to the scores of those who stay are about as often higher as lower. A tabulation analysis of the individual scores in a single test was made to show the number and percentage of pupils who stayed or left. In each grade one hundred unselected cases were divided into three groups, according to their ability scores. The basis for grouping was the following: the whole range of scores was divided

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[3] Thorndike, E. L., *op. cit.*, pp. 60–76.

into the lower quarter, middle half, and upper quarter, and the cases were grouped according as their scores fell within these three divisions.

"If ability had no effect on a pupil's staying or leaving, practically the same percentage of pupils would have stayed or left in each ability group. Comparison of the percentages of defection for the respective groups indicates the type of student tending to withdraw. Of those who left in the beginner's grade, more than 50 per cent were of the very able, or the very poor—in other words, those to whom the work was least suited. In other grades, as the average ability of the class rises, the withdrawals in the lower quarter are a larger and larger percentage as compared with the withdrawals in the other groups. This means that to hold the interest of the immigrant and to win him to persistent effort, the evening-school work must be sufficiently within his grasp to give the pleasure and stimulation of conscious success."[4]

In addition to these findings of Thorndike and Thompson, and the results of the investigation at hand, it might be well to approach the question from a different angle, viz.; teacher judgment and pupil judgment.

When the teachers were asked to render their report on drop-outs they were also requested to give the reason for leaving in each case, to the extent of which they were able. It is significant that these 230 teachers, reporting on 1,494 drop-outs, gave inability to do the work as the reason for leaving in less than one per cent of the cases.

Interviews with drop-outs substantiated this report of the teachers. Each of the pupils was asked the reason for leaving, and in less than two per cent of the cases was inability to do the work mentioned, although this point was stressed by the interviewer.

It will be recalled too, that in Table XLIX, of 3,081 individuals to whom the questionnaire was administered only 20 reported that the work which they were taking was too difficult for them, and only 71 said that it was too easy. These numbers are so small that considerable allowance can be made for inaccuracies without seriously impairing the reliability of the results.

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[4] Thompson, Frank *V., op. cit.*, pp. 216–224.

VII

A Check on the Reliability of the Information Given in the Questionnaire

It was recognized in the administration of the questionnaire that the information there contained might be unreliable because of any combination of the following reasons:

(1) deliberate misrepresentation on the part of the one answering the questions.
(2) inability to answer the questions due to:

(a) personal deficiency,
(b) ambiguity of the questions.

In order to determine to what extent any or all of these possibilities really operated to reduce the reliability of the information, it was decided to interview a representative sampling of the individuals at their homes.

This interviewing was of three types:

(1) A formal kind of interview in which the investigator stated that he represented the Philadelphia Evening Schools, and then continued in approximately the following vein: "On last November 19 you filled out a questionnaire which we have found extremely useful. There are almost four thousand such returns, and considerable time and energy will be necessary in tabulating the results. Therefore it has been considered wise to secure an additional check on the information furnished. This is not because it is felt that the students have made false representations, but because we don't know whether or not some of the questions on the questionnaire were clear, and are trying to determine that fact through these visits.

For this purpose a representative number have been selected from the total, and you just happen to be one of that number. So if you can spare a few minutes it would be a help to us and would be appreciated."

Usually the student would answer to the effect that he had no objection to helping. But what was he supposed to do?

The interviewer would then continue, "If you will, I would like you to give me answers to the questions on this questionnaire, which is the same as the one which you filled out in school. I have your original here and will check the answers which you now give against the answers which you gave before. There is nothing for you to write. If there are any questions which you don't care to answer just tell me so."

After the questionnaire had been gone over, the interviewer in most cases asked the student whether or not he remembered anything which had been written the first time. Invariably the answer was "No," and many added that they had even forgotten about the questionnaire until they were reminded of it. Sometimes during the answering of the questions, the interviewer would call attention to certain questions and ask the student if he recalled what his answer had been before. In many instances the student himself asked what he had said before in answer to certain questions.

Wherever possible questions were omitted in the interviews. Thus the investigator simply noted race and difficulty of understanding English. The student also was not asked to repeat how many minutes it took him to get to evening school, because this was approximately evident from the location of the home and the mode of transportation. Question 14 which asked the student whether or not he expected his work to cause him to be absent from school later on was omitted for obvious reasons. The individual was not asked to repeat the reasons given for absences as asked in question 30, because it was felt that these would probably have been forgotten by that time; especially since in most cases there would have been other absences subsequent to November 19. Finally questions 31 and 32 were also omitted because they were not designed for statistical purposes, but merely as drag-net questions which might uncover some worthwhile suggestions for evening school procedure.

(2) An informal type of interview in which the investigator had in mind certain leading questions and directed the conversation about them. The purpose of this type of interview was to

encourage the individual to talk freely, but at the same time to keep the conversation within certain definite channels. Those interviewed in this way were all drop-outs and the approach was on this basis. Thus the investigator would talk about as follows: "I represent the evening schools of Philadelphia and we are trying to get information which will help us to improve the work. As you know, there is considerable dropping out of the evening schools, and it is felt that if the reasons for this could be determined it would be extremely helpful. We are not trying to check on you or the school but we feel that you can help us if you will. I understand that you attended ..... Evening High School last winter but dropped out before the end of the year. What was the trouble?"

After the student had explained why he had discontinued evening school and questions pertinent to this had been asked, the investigator asked him how he had liked the work at school. This led naturally to a discussion of the classroom work, how he had happened to select that particular type of work, whether or not his employer approved of his attending evening school, etc.; depending somewhat upon the development of the conversation. The investigator attempted to keep it tuned to the questionnaire but at the same time natural, so as not to create the impression that pointed questions were being asked. Consequently only a portion of the questionnaire was covered in each interview, but an attempt was made to scatter the responses. At no time was the questionnaire mentioned or exhibited by the interviewer, but a few of the students mentioned that they had filled out a questionnaire one night in school. Immediately upon leaving the house the interviewer checked the answers just given against the original answers on the questionnaire, and noted also the reason for leaving. As in the other type of interview certain facts which could be determined without definite questioning, were noted, such as for example race and ability to understand English. Special care was taken to check on apparent discrepancies. For example this type of interview did not lend itself naturally to asking the age of the student, nor can one always ascertain at a glance the age of an individual; but extreme variation might be noted, and slight differences would have no real significance.

Comparative Advantages and Disadvantages of the Two Types of Interview

The second type of interview furnished perhaps a better chance to gauge the attitude of the individual and his honesty in furnishing the information requested on the questionnaire. The informality of it at least afforded a different sort of approach from that found in the administration of the questionnaire, and induced a greater spontaneity of response on the part of the student. However the reaction did not seem to be quite so favorable as in the other type of interview, apparently because it was more difficult to get the student to see the reason for it, and also because it required a certain initiative on the part of the student.

The formal type of interview in which the questionnaire was used enabled the interviewer to cover practically every question with each individual; took less time; and as stated before, seemed to induce a better reaction from the student. It furnished a better check on the ability of the individual to interpret and answer the questions, than was the case with the other kind of interview. It also had the advantage of enabling the investigator to check items immediately and ask questions about doubtful points. On the whole the formal interview seemed more satisfactory for the purpose at hand.

(3) Finally in cases where the individual was not available for interview, the investigator talked to any friends or relatives who happened to be present. Information obtained in this way was not used to check the information given on the questionnaire but merely as a means of securing additional light on the reasons for elimination. As will be seen later, the results obtained in this way agree substantially with those obtained from the individuals concerned.

All of the interviewing was conducted by the writer, and an effort was made to secure a fair sampling for this purpose; as to school; course; sex; geographical location; apparent social status; and in the formal type of interview, on the basis of elimination.

In order to secure a fair sampling socially and geographically the following procedure was employed. The area supplying

students for each school was subdivided into five or more districts, depending upon the numerical distribution of the students. Then a representative number of individuals were selected from each of these sections, but with an eye toward maintaining a fair distribution between the sexes and the courses; and as specified above, on the basis of elimination. The questionnaires of these individuals were then arranged according to location, in such a way as to expedite the work, and at the same time secure what seemed to be a fair distribution socially, by apportioning the interviews between those who lived in cheap houses on back streets and those who dwelt in more pretentious homes on better streets. In cases where an interview proved to be impossible the investigator moved on to the next on the list. If however, the prospective interviewee happened to be a drop-out, an effort was made to secure information bearing upon elimination from some other member of the family. The actual distribution according to the other criteria will be given in the discussion of results.

Sunday was found to be the most effective time for the interviews. On that day, within certain hours, a larger percentage of those visited would be found at home, and they had more leisure at their disposal. Between nine and ten o'clock in the morning seemed to be a good starting time, and success could be maintained until about five o'clock in the afternoon; unless it happened that it was the sort of day which invites people outdoors, in which case the interviewer would find himself wasting time after about two o'clock.

During the week interviewing could be effectively carried on from about half-past six o'clock until approximately eight, although the writer usually had sufficient success to warrant continuing until about nine, and sometimes later. It was found that before half-past six many of those visited had not completed the evening meal, and after eight o'clock some had gone out for the evening. But as stated before, a sufficient number were usually found at home until about nine o'clock to make the effort worth while. On disagreeable or cold nights this was especially true.

In some of the more thickly populated and poorer neighborhoods Saturday afternoons were found to be quite good for interviewing. Many of the girls would be found at home; and

the boys, if not at home, could usually be found in the immediate neighborhood. But in the better sections the degree of success hardly warranted the effort. On Saturdays too, it was usually possible to continue with success until later in the evening than during the remainder of the week, because those who were going out as a rule left home at a later hour.

The general reaction of those interviewed was extremely favorable. In fact the chief difficulty experienced was in preventing the interview from developing into a social call, with a considerable waste of time from the standpoint of the purpose at hand. This was particularly true when parents were present. Of the entire number interviewed there were only four who flatly refused to answer questions. Usually the investigator was invited into the house.

Altogether there were six instances in which incorrect addresses had been given. Three of these were cases in which the individuals lived outside of the city limits and to evade the payment of a tuition fee, which was required of those who did not live in the city, had registered from the homes of friends. In the other three cases no information was obtained as to the motive but it is possible that the same reason operated.

Of those interviewed only three were found who had deliberately made false returns on the questionnaire. These were day school students who had misrepresented on such items as "age of leaving day school" and "occupation," because, as stated before, day school students were not permitted to take evening school work in Philadelphia.

Formal Interview with Use of Questionnaire

In all there were 238 individuals interviewed in this manner. The distribution of these by school was: Frankford 53, Mastbaum 55, South Philadelphia 64, West Philadelphia 66,—by course: industrial 44, home economics 33, English and citizenship 8, academic 42, commercial 101, physical education 10,—by sex: male 120, female 118,—by elimination: stay-ins 123, drop-outs 115.

Extent of Verification of Questionnaire Information Secured by Formal Type of Interview

In recording these responses "correct" shall mean that the same answer was given in the interview that was made on the questionnaire; "incorrect" shall indicate that a different answer was given; and "not marked" shall mean either that the question was not answered on the questionnaire or in a few cases that the response given in the interview could not be classified. These last have not been included in the calculation of the percentages of verification.

In presenting the data according to the following tabulation, "one year less," etc., will mean that in the interview the student gave an age less than that given on the questionnaire. Other changes are to be interpreted in the same way. The number headings refer to the numbers of the questions on the questionnaire.

3. Age

Correct	211
One year less	11
One year more	10
Two years less	1
Two years more	1
Three years more	1
Not marked	3
Percentage of verification	90

4. Sex

Correct	223
Not marked	15
Percentage of verification	100

5. Race

Correct	237
Not marked	1
Percentage of verification	100

6. Marital Relationship

Correct	215
Not marked	23
Percentage of verification	100

7. Country of Birth

Correct	236
Not marked	2
Percentage of verification	100

8. Age of Entry into United States of Those Born Elsewhere

Correct	17
One year less	1
One year more	1
Two years more	1
Three years more	1
Fourteen years more	1
Percentage of verification	77
Born in United States	216

9. Difficulty in Understanding English

Correct	200
Not marked	31
Change from "yes" to "no"	4
Change from "no" to "yes"	3
Percentage of verification	97

10. Mode of Transportation

Correct	217
Change from trolley to walking	4
Change from walking to trolley	1
Change from walking to auto	1
Change from trolley to auto	1
Change from trolley and walking to auto	1
Partially correct	5
Not marked	8
Percentage of verification	97

Those cases are "partially correct" in which the individual underlined two answers on the questionnaire and in the interview repeated one of them, or in which the reverse of this occurred. If more than two answers had been underlined the answer was classified as "not marked". Partially correct responses were not included in the calculation of the percentages of verification.

12. Daily Occupation

Correct	231
Not marked	3
Incorrect	4
Percentage of verification	98

Of the incorrect two changed from "at home" to "student in the day school."

13. Time of Starting Daily Work

Correct	200
Not marked	11
Unemployed	2
At home	8
Incorrect	17
Percentage of verification	92

Incorrect

5 to 15 minutes earlier	3
5 to 15 minutes later	1
16 to 30 minutes earlier	7
16 to 30 minutes later	3
46 to 60 minutes earlier	1
46 to 60 minutes later	1
More than 60 minutes later	1

13. Time of Stopping Daily Work

Correct	183
Not marked	10
Unemployed	2
At home	8
Incorrect	35
Percentage of verification	84

Incorrect

5 to 15 minutes earlier	2
5 to 15 minutes later	7
16 to 30 minutes earlier	13
16 to 30 minutes later	7
31 to 45 minutes earlier	1
46 to 60 minutes earlier	2
46 to 60 minutes later	1

More than 60 minutes later	1
Definite time replaced by "indefinite"	1

In many cases the time of stopping daily work varies throughout the year with the result that some of those interviewed had difficulty in remembering what their working hours had been at the time the questionnaire was filled out.

15. Age of Leaving Day School

Correct	180
Not marked	15
One year earlier	25
One year later	10
Two years earlier	2
Two years later	1
Three years later	2
Six years earlier	1
Percentage of verification	81

In two cases the answer "16" was replaced by the fact that they were still attending day school.

It will be noted that 35 of the 41 incorrect responses showed differences of only one year.

16. Last Grade Completed in Day School

Correct	184
Not marked	11
Incorrect	43
Percentage of verification	81

Incorrect

One-half to one year earlier	21
One-half to one year later	9
One and one-half to two years earlier	6
One and one-half to two years later	1
More than two years earlier	2
More than two years later	2
Replaced "8" by "hadn't left"	2

17. Reason for Leaving Day School

Correct	132
Partially correct	6
Not marked	20
Graduated (not counted)	22
Incorrect	58
Percentage of verification	70

Incorrect

"Couldn't afford to continue" replaced "wanted to work"	15
"Wanted to work" replaced "couldn't afford to continue"	12
"Disliked day school" replaced "wanted to work"	4
"Wanted to work" replaced "disliked day school"	4
"Didn't get along in day school" replaced "wanted to work"	3
"Couldn't afford to continue" replaced "disliked day school"	3

The other types of incorrect responses have each a frequency of only one.

It will be noticed that a major portion of the replacements center about the desire to go to work and the economic reason for leaving school, and that the changes from one to the other of these are about equally distributed. Although the numbers are less, the same situation holds between the "desire to work" and "dislike for day school".

Several of those interviewed who had marked only one answer, said that they had left school because of a combination of reasons. This in connection with the percentage of verification illustrates the low reliability attached to answers to this question.

18. Number of Years Previously Completed in Evening School

Correct	184
Not marked	42
Incorrect	12
Percentage of verification	94

Incorrect

Not over one year less	6
Not over one year more	4
Over one but not over two years less	1
Over one but not over two years more	1

In only one case did a student claim to have completed one or more years of evening school, and then in the interview say that he had completed none. Of the 12 incorrect responses 10 were wrong only to the extent of one year or less.

Of the 42 who are listed as "not marked" it was found in the interviews that 40 had not completed any years of evening school, one had completed one year, and in one case no satisfactory answer was obtained. It was on the basis of this, that in the compilation of Tables XLI and XLII those who had given no answer to this question, were included with those who had recorded zero.

19. Previous Elimination from Evening School

Correct	186
Not marked	40
Incorrect	12
Percentage of verification	94

Incorrect

Replaced "no" by "yes"	10
Replaced "yes" by "no"	1
Replaced "yes" and "no" by "yes"	1

Of those not marked 30 gave "No" for an answer in the interview, while 5 answered "Yes". In the other 5 cases satisfactory responses were not secured. As in the verification of question 18, on the basis of this those who had not answered the question were classified with those who had answered in the negative.

The tendency indicated here from "no" to "yes" indicates that probably there was more elimination than was reported. However the number represented is small. A few of those interviewed stated that they had dropped out several years before, but hadn't recorded it because they thought it would be of no interest. A few others said that they had attended until near the end of the year, and in filling out the questionnaire had not considered themselves as drop-outs.

19a. Reason for Previous Elimination

Correct	21
Not marked	212
Incorrect	5
Percentage of verification	81

The number of cases represented here is too small to permit one to draw conclusions. The incorrect responses were all of different type.

20. Reason for Attending Evening School

Correct	146
Partially correct	27
Not marked	12
Incorrect	53
Percentage of verification	73

Incorrect

Change from "to learn a trade" to "improve education	10
Change from "advancement at work" to "improve education"	9
Change from "to learn something useful" to "improve education"	8
Change from "to learn something useful" to "advancement at work"	4
Change from "to improve education" to "advancement at work"	4
Change from "to improve education" to "learn a trade"	3
Change from "to learn something useful" to "learn a trade"	3
Change from "to learn a trade" to "advancement at work"	2
Change from "to learn a trade" to "to learn something useful"	2
Change from "to improve education" to "to learn something useful"	2
Change from "to learn something useful" to "pleasure"	2

The remainder of the incorrect responses have each a frequency of only one.

There is noticeable through the interviews a definite swing toward "improvement of education" as a motive. A considerable number of those who filled out the questionnaire had underscored more than one of the suggested answers. Many of those interviewed had difficulty in selecting their most prominent reason for evening school attendance. Some expressed it by the response that they went to improve their education for advancement at work. These facts in connection with the low

percentage of verification indicate comparatively poor reliability. The incorrect responses show considerable variation in type,

22. Adequacy of the Subjects Being Taken

Correct	212
Not marked	2
Incorrect	24
Percentage of verification	90

Incorrect

Change from "I don't know" to "yes"	14
Change from "yes" to "no"	4
Change from "I don't know" to "no"	3
Change from "no" to "yes"	2
Change from "yes" to "I don't know"	1

The trend seems to be from "I don't know" to "yes". Some marked "I don't know" because they were taking two subjects and had a different feeling about each.

23. What Influenced the Selection of Subjects

Correct	188
Partially correct	2
Not marked	7
Incorrect	41
Percentage of verification	82

Incorrect

Change from "I selected them" to "somebody outside"	24
Change from "somebody outside" to "I selected them"	11
Change from "I selected them" to "A teacher advised me"	4
Change from "a teacher advised me" to "I selected them"	1
Change from "a teacher advised me" to "somebody outside"	1

There is a tendency here indicated to increase the importance of "somebody outside," who in many cases happened to be the employer. A few said that they had been advised but that they themselves had really made the selection.

24. Intention Concerning Attendance the Following Year

Correct	179
Not marked	13
Incorrect	46
Percentage of verification	80

Incorrect

Change from "undecided" to "yes"	27
Change from "yes" to "undecided"	9
Change from "undecided" to "no"	5
Change from "yes" to "no"	3
Change from "no" to "undecided"	2

The tendency here seems to be toward a crystalization of decision. Of the 46 incorrect responses a total of 32 changed from "I don't know" to either "yes" or "no".

24a. School Selected for Following Year

Correct	156
Not marked	76
Incorrect	6
Percentage of verification	96

The percentage of verification here is very high, the overwhelming intention of the students being to return to the same school.

25. Difficulty of the Evening School Work

Correct	139
Not marked	19
Partially correct	4
Incorrect	76
Percentage of verification	65

Incorrect

Change from "easy but not too easy" to "difficult but not too difficult"	27
Change from "difficult but not too difficult" to "easy but not too easy"	38
Change from "easy but not too easy" to "too easy"	4
Change from "difficult but not too difficult" to "too difficult"	2

Other changes are of single frequency each.

The percentage of verification on this question is lower than in any other case, and this appears to be due to the difficulty of discriminating between "difficult but not too difficult" and "easy but not too easy". Of the 76 incorrect responses a total of 65 are shifts from one to the other of these two answers. As stated before it would have been better to have suggested three gradations of difficulty on the questionnaire, rather than the four which were used. It was also mentioned before that for the purpose of the problem there is not much significance attached to a distinction between "difficult but not too difficult" and "easy but not too easy". Many of those interviewed said that the work was just right.

26. Employer's Knowledge of Evening School Attendance

Correct	174
Not marked	18
Incorrect	44
Worked for self	2
Percentage of verification	80

Incorrect

Change from "I don't know" to "yes"	12
Change from "I don't know" to "no"	11
Change from "yes" to "no"	11
Change from "no" to "yes"	5
Change from "no" to "I don't know"	3
Change from "yes" to "I don't know"	2

In many cases those interviewed said that when the questionnaire was answered they didn't know whether or not the employer knew that they were attending evening school. Thus of the 44 incorrect responses 32 replaced "I don't know" by "yes" or "no". In the changes concerning "yes" and "no" the trend seems to be toward an increase of the latter. Some of those interviewed said that they didn't know whether the question referred to the real employer or the immediate boss.

26a. Encouragement Given by Employer

Correct	85
Not marked	141
Indifferent	2

Worked for self 2
Incorrect 8
Percentage of verification 91

INCORRECT

Change from "yes" to "no" 4
Change from "no" to "yes" 3
Change from "yes" to "didn't care" 1

The high percentage of "not marked" is due to the fact that for most of those who had answered the preceding question in the negative, this question called for no response. The answers to the next question are similarly affected.

26b. DISCOURAGEMENT GIVEN BY EMPLOYER

Correct 78
Not marked 152
Worked for self 2
Incorrect 6
Percentage of verification 93

INCORRECT

Change from "yes" to "no" 4
Change from "yes" to "didn't care" 2

27. MEDIUM THROUGH WHICH EVENING SCHOOL WAS FIRST SUGGESTED

Correct 151
Partially correct 6
Not marked 17
Incorrect 64
Percentage of verification 70

INCORRECT

Change from "somebody in family" to "friend" 11
Change from "somebody in family" to "myself" 9
Change from "myself" to "friend" 7
Change from "friend" to "somebody in family" 3
Change from "myself" to "somebody in family" 3
Change from "friend" to "myself" 3
Change from "employer" to "friend" 2
Change from "teacher in day school" to "friend" 2

Change from "somebody in family" to "teacher in day school"	2
Change from "somebody in family" to "employer"	2
Change from "somebody in family" to "newspapers"	2
Change from "posters" to "friend"	2
Change from "newspapers" to "friend"	2
Change from "myself" to "newspapers"	2

The remaining incorrect responses have each a frequency of only one.

Many of those interviewed were unable to name the medium which had first suggested evening school to them; with the result that they answered, as many had done on the questionnaire, that "they just knew about it" or "they had thought of it themselves." Thus "myself" figures prominently on the questionnaire, and in the interviews it was found to be involved in 28 of the 64 incorrect responses. The omission of these cases would raise the percentage of verification, and could be defended on the score that these individuals had really not answered the question. Nevertheless it has seemed wise not to make this omission, because the attempt is being made here merely to check the answers given, regardless of their meaning. The fact that about one in six answered the question in this way, together with the low percentage of verification secured, and the obvious difficulty some had in answering this question in the interview; all indicate a low degree of reliability in the answers.

28. Desire for Homework

Correct	149
Not marked	34
Incorrect	45
Percentage of verification	77

Incorrect

Change from "yes" to "no"	24
Change from "no" to "yes"	20
Change from "no" to "I don't care"	1

While the percentage of verification here obtained is comparatively low, it will, however, be noticed that the changes from "yes" to "no" and vice versa are about equally balanced. This

indicates that probably the percentages of "yes" and "no" in the total group are approximately correct.

29. Desire for Tests

Correct	144
Not marked	37
Incorrect	47
Percentage of verification	75

Incorrect

Change from "no" to "yes"	32
Change from "yes" to "no"	10
Change from "yes" to "doesn't matter"	3
Change from "no" to "doesn't matter"	1
Change from "doesn't matter" to "yes"	1

If those who answered "doesn't matter" are excluded, the percentage of verification is increased to 77.

In Table LV it was seen that almost three-fourths of all the students there considered were in favor of having tests. The results reported here show a tendency to increase the ratio.

In checking questions 28 and 29 the physical education groups were not included because the questions would have no significance for them.

Informal Interview Without Use of Questionnaire

In this informal type of interview 172 individuals were questioned. The distribution of these by school was: Frankford 46, Mastbaum 66, South Philadelphia 47, West Philadelphia 13,—by course: industrial 30, home economics 29, commercial 64, academic 31, English and citizenship 11, physical education 7,—by sex: male 73, female 99,—by elimination: all except one were drop-outs.

It will be noticed that with a single exception all those represented here are drop-outs. The purpose in making a selection of this sort was to enable the interviewer to determine also the reasons for elimination. The previous investigation indicated that this was quite safe from the standpoint of verification of the

information secured on the questionnaire, because there it was found that the answers given by the group of drop-outs were of about the same degree of accuracy as those given by the stay-ins. It was also shown that there were no significant differences between the schools.

Before interviewing each student the interviewer went over the questionnaire turned in by that individual, and on the basis of this, sought information bearing on as many answers as possible; with particular attention to those answers which seemed to warrant it. Thus the number of checks varies from question to question.

These results will be reported in a more general way than were those secured by the other type of interview, because the purpose was principally to discover significant inaccuracies in the answers submitted on the questionnaire. It was felt that the different approach might bring out facts which the other type of interview would not disclose. The results, however, are not so objective as in the other case.

3. Age

Of the total number interviewed two cases of significant differences were noted. On questioning these proved to represent departures from the answers given before of six and eight years respectively.

Questions 4, 5, 6, and 7, were not investigated because in the other type of interview they had registered 100 per cent verification. Certain other omissions have been made because of lack of time and opportunity.

8. Age of Entry into the United States

There were 10 responses secured on this question, 2 of which were incorrect. Percentage of verification—80.

9. Difficulty in Understanding English

Based upon the observation of the interviewer, 7 of the 171 interviewed were classified as incorrect. Percentage of verification—96.

10. Mode of Transportation

Of the 50 responses secured on this question only 2 were incorrect. Percentage of verification—96.

12. Occupation

Correct	142
Not marked	43
Unemployed	2
Incorrect	4
Percentage of verification	97

15. Age of Leaving Day School

Correct	71
Incorrect by one year	2
Incorrect by four years	2
Percentage of verification	95

16. Last Grade Completed in Day School

Correct	122
Incorrect by one year or less	8
Incorrect by two years or less	4
Incorrect by more than two years	2
Percentage of verification	90

17. Reason for Leaving Day School

Correct	69
Graduated	13
Partially correct	7
Incorrect	23
Percentage of verification	75

Incorrect

Change from "wanted to work" to "economic reason"	8
Change from "economic reason" to "didn't get along"	3
Change from "economic reason" to "wanted to work"	2
Change from "couldn't see value of any more education" to "economic reason"	2

Other incorrect responses are of single frequency in each type.

18. Number of Years Previously Completed in Evening School

Correct	98
Not marked	31
Incorrect	13
Percentage of verification	88

Incorrect

Not more than one year	9
More than one but not more than two years	3
More than two years	1

19. Previous Elimination from Evening School

Correct	89
Not marked	13
Incorrect	6
Percentage of verification	94

Incorrect

Change from "no" to "yes"	5
Change from "yes" to "no"	1

Of the 13 who had given no answer to this question on the questionnaire each stated in the interview that he had never dropped out of evening school before.

19a. Reason for Previous Elimination

Correct	15
Incorrect	3
Percentage of verification	83

20. Reason for Attending Evening School

Correct	79
Partially correct	9
Not marked	2
Incorrect	9
Percentage of verification	90

Of the incorrect 4 changed from "improve education" to "advancement at work." The other changes were of single frequency.

22. Adequacy of the Subjects Being Taken

Correct	87
Incorrect	5
Percentage of verification	94

Of the incorrect 3 changed from "yes" to "no."

23. What Influenced the Selection of Subjects

Correct	74
Incorrect	1
Percentage of verification	99

24. Intention Concerning Attendance the Following Year

Correct	52
Incorrect	8
Percentage of verification	87

Of the incorrect answers 5 changed from "I don't know" to "yes," and 2 from "I don't know" to "no."

24a. School Selected for Following Year

Correct	31
Incorrect	3
Percentage of verification	91

25. Difficulty of the Evening School Work

Correct	63
Incorrect	10
Percentage of verification	86

Incorrect

Change from "easy but not too easy" to "too easy"	3
Change from "easy but not too easy" to "too difficult"	2
Change from "too easy" to "easy but not too easy"	2
Change from "too difficult" to "difficult but not too difficult"	1

26. Employer's Knowledge of Evening School Attendance

Correct	68
Incorrect	13
Percentage of verification	84

INCORRECT

Change from "yes" to "no"	3
Change from "I don't know" to "no"	3
Change from "I don't know" to "yes"	2
Change from "I don't know" to "unemployed"	2

The other types of conflicts are each of single frequency.

26a. ENCOURAGEMENT GIVEN BY EMPLOYER

Correct	36
Incorrect	4
Percentage of verification	90

All of the types of incorrect responses are each of single frequency.

26b. DISCOURAGEMENT GIVEN BY EMPLOYER

Correct	34
Incorrect	2
Percentage of verification	94

27. MEDIUM THROUGH WHICH EVENING SCHOOL WAS FIRST SUGGESTED

Correct	43
Partially correct	1
Not marked	1
Incorrect	16
Percentage of verification	73

INCORRECT

Change from "somebody in family" to "friend"	8
Change from "employer" to "friend"	2
Change from "teacher in day school" to "somebody in family"	2

The other types of incorrect responses are each of single frequency.

The percentages of verification for each question, obtained by each of the two methods of interviewing are presented in Table LVII.

It is recognized that the method of verification here applied is open to criticism on the ground that the student was the source of information in both the questionnaire and the interview. This gives rise to the following possibilities:

TABLE LVII

PERCENTAGES OF VERIFICATION

NUMBER OF QUESTION	FORMAL INTERVIEW	INFORMAL INTERVIEW
3	90	.....
4	100	.....
5	100	.....
6	100	.....
7	100	.....
8	77	80
9	97	96
10	97	96
12	98	97
13 (starting time)	92	.....
13 (stopping time)	84	.....
15	81	95
16	81	90
17	70	75
18	94	88
19	94	94
19a	81	83
20	73	90
22	90	94
23	82	99
24	80	87
24a	96	91
25	65	86
26	80	84
26a	91	90
26b	93	94
27	70	73
28	77	.....
29	75	.....

1. Students might have deliberately misrepresented in both instances.

2. They themselves might have been in error both times.

3. Faulty interpretation of the questions or incorrect analysis of answers might have been repeated.

The first of these possibilities, deliberate misrepresentation, seems to have been almost non-existent. If any significant tendencies in this direction had been present, there would probably have been evidence of it in the interviews. It has already been explained how, for this reason, a sufficient length of time was permitted to elapse between the administration of the questionnaire and the visit to the home.

The second chance seems equally remote. It is difficult to believe that any considerable number of evening school students would be unable to supply the objective facts requested on the questionnaire, and this feeling is supported by the prompt manner in which most of the responses were made in the interviews. Moreover, in the few cases where errors of this type might be made, the probability is that they would not vary much from the truth. For example, in answer to the question, "what was the last grade you completed in day school?" the few differences noted between the response on the questionnaire and that given in the interview, were mostly variations of a half-year or a year.

The third possibility offers greater difficulty, and it was for this reason that the two types of interview were used. The informal method of presenting the questions in simple fashion virtually eliminated the chance of misunderstanding; and since these responses were entered by the interviewer, whereas this had previously been done by the student, a check was secured on the ability of the latter to analyze and properly classify his answers to individual questions.

In summation it appears that the method of verification under discussion was adequate for the purpose. Furthermore, it seemed to be the only procedure which could be generally applied, and which was commensurate with the time and facilities available.

It will be noticed that in a majority of the comparisons given in Table LVII, the percentages of verification obtained in the informal type of interview are somewhat higher than those secured in the formal interviews. The explanation for this might lie in the fact that in the former method of approach the student had an opportunity to explain.

VIII

Reasons for Elimination from the Public Evening High School

Although the problem of elimination has been of major importance to the public evening school since its inception, and particularly since its expansion in recent years, there seems to be little scientific material dealing with causes of elimination. Usually in the literature of the night school, when mention is made of elimination and reasons assigned for it, these reasons are based upon the experience and judgment of the writer. The problem however, is of such significance to those engaged in evening school work, that in all probability there have been various unpublished efforts dealing with it; yet apparently no city or large organization has made a serious study of the situation. The following quotation supports this contention:

"Correspondence with the Departments of Education at Boston, Chicago, Cleveland, and Washington elicited the information that while each place was concerned about the matter, none had made any organized study of the question . . . As one man put it, this is a 'virgin field' of investigation."[1]

There are probably several reasons for this apparent dearth of material.

1. Elimination from evening school is so often the result of emotional reaction on the part of the student that it does not lend itself to objective study. To be sure it seems possible to detect factors which appear to be favorable or hostile to persistence, but in most individual cases the student is the only one who really knows the answer.

2. If this reasoning is sound it follows that the drop-outs must be consulted, either in interview or by questionnaire. This introduces an element of uncertainty similar to that already discussed in the determination of the reasons for withdrawal from day school. The conditions here, however, seem to be more favorable

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[1] Miller, Henry S., Unpublished Master's Thesis, Temple University (1930), p. 20.

because of the greater maturity of the individuals; the comparatively less potent incentives for hiding the real reason; and the fact that certain troublesome but prominent reasons for leaving day school, such as "financial inability to continue" and "wanted to work" do not enter as reasons for elimination from evening school.

3. Circularizing the withdrawals begets only a meagre response and one which probably is selective. Miller in the study quoted above secured only about 19 per cent returns on 500 letters which he sent to drop-outs, and as a result decided on interviews. One of the teachers of the West Philadelphia Evening High School obtained only a 10 per cent response to letters which he sent out. A study of several hundred commercial graduates of the Frankford Day High School obtained responses to letters in about one-third of the cases.

4. The interview is not entirely satisfactory but it seems to offer the best approach to the problem. In a large percentage of the cases the real reason or the real interpretation of a given reason can be extracted only after persistent questioning and gaining the confidence of the individual. The questions should be varied but definitely centered upon the purpose at hand, and should approach the same point from different angles.

Previous Studies

1. The earliest reported attempt to learn the reasons for leaving evening school seems to have been conducted at the McAllister School in Chicago in 1917.[2] In this investigation all of the drop-outs of the school, a total of 129, were interviewed; and the reasons which they gave for leaving are as follows:

Overtime work	26
Night work	4
Working hours too long for the pupil to go to school	6
Work too exhausting	5
Home work (among girls)	4
No work	3

[2] *Ninth Annual Report of the Immigrants' Protective League of Chicago* (Dec., 1917), p. 21.

Discouragement about school	10
No desire to learn English	3
Illness or family circumstances	18
All other reasons	22
Pupils not found (wrong address)	28
Total	129

TABLE LVIII

REASONS GIVEN BY THE DROPS IN THE PERSONAL INTERVIEW[3]

A. Reasons Relating to the School:			
I. Improper grading of pupil	4		C
II. Teacher efficiency	3		C
III. Enrollment in other Philadelphia Evening Schools	4		F
Total		11	
B. Reasons Relating to the Individual:			
I. Incapacity to keep up with class	4		C
II. Indifference	19		A
III. Industrial conditions:			
(a) Variable hours of quitting work	5		B
(b) Night work	7		B
(c) Overtime work	15		B
(d) Worked to help husband	3		B
(e) Fatigue	3		B
IV. Social conditions:			
(a) Removals:			
(1) Too far from school	5		F
(2) From city (temporary)	2		F
(3) From city (permanent)	9		F
(4) Not relocated	15		F
(b) Joined other social or vocational organizations	2		F
(c) Home duties	9		D
(d) Health of pupil	13		E
(e) Sickness in the family	8		D
(f) Vaccination	3		E
(g) Incorrect address	4		
(h) Miscellaneous	4		
Total		132	
Grand Total		143	

2. In 1929 a study of drop-outs was made in Philadelphia by John O'Boyle, Principal of the Kearney School of that city. He

[3] *Op. cit.*, unpublished.

interviewed 143 drop-outs of three public evening elementary schools to obtain the reasons for withdrawal. The results are presented in Table LVIII which has been taken from his study.

3. In the same year a similar study was made by Henry S. Miller in the South Philadelphia Evening High School. He interviewed a total of 208 drop-outs from that institution during the school year, and the reasons which he secured for leaving are given in Table LIX, which has been taken from his report.

TABLE LIX

DISTRIBUTION OF REASONS FOR LEAVING SOUTH PHILADELPHIA EVENING HIGH SCHOOL OBTAINED THROUGH INTERVIEWS[4]

REASONS	PERCENT	
1. Working overtime	21.6	B
2. Fatigue	10.6	B
3. Course not what was expected	8.2	C
4. Change in hours of work	11.6	B
5. Lost interest	14.0	A
6. Moved from district or city	5.7	F
7. Personal illness	4.3	E
8. Social duties	6.7	A
9. Attending other schools	5.7	F
10. School work too difficult	1.4	C
11. Teaching unsatisfactory	1.0	C
12. Illness in family	2.9	D
13. School work too easy	1.0	C
14. Long distance from school	1.5	F
15. Miscellaneous	3.8	

Two other studies deserve mention in this connection, but the results are not presented.

The first of these is an investigation reported in the American School Board Journal of February, 1927; by G. L. McCulloch,[5] Assistant Superintendent of Schools in Jackson, Michigan. Here the drop-outs were circularized and in 153 cases answers were obtained.

The other is a study recently made of 2,121 drop-outs in six public evening high schools of Chicago. The reasons for leaving were secured by teachers, either by mail or by questioning other

[4] *Op. cit.*, p. 51.
[5] Volume 74, p. 38.

students who were in attendance. It is not clear to what extent personal interviews were used. The results of this investigation are reported by Miller[6] and are based upon information supplied by the Director of Evening Schools of Chicago.

The Reasons for Leaving the Public Evening High School as Determined by Interviews with 301 Drop-Outs in Philadelphia

Mention has already been made of the manner of conducting these interviews and of the method of selecting the individuals who were to be visited. Therefore, in this discussion consideration will be given only to the results obtained.

If we assume that the responses are substantially correct, the major problem which confronts the investigator is one of classification. Into this he must, to some extent, project his own judgment; in an effort to convey to the reader a real picture of the situation, and at the same time have the material so consolidated as to emphasize its significance. Too much consolidation is apt to destroy the feel of the situation, while on the other hand if the classification is too diffuse it loses effectiveness.

In consolidating the material secured in this study, the writer has made use of the following major divisions.

A. Reasons related to the individual. This includes lack of interest, other interests, inertia, etc. It does not include those cases in which the student was influenced by some defect in the school, or by some factor or factors beyond his control.

B. Those reasons which arise out of the daily position of the student. Overtime, night work, out of town on work, etc., are included. Cases in which the demands of the job seemed to be only partial factors have not been placed here. For example, if overtime lasted only one or even two weeks the student's failure to return after that time was attributed to inertia. The selection of this length of time as the criterion for discrimination was in part arbitrary, but it had its basis in the study of attendance habits.

C. Cases involving real or apparent shortcomings of the school. This includes poor teaching, inferior equipment, lack of discipline in the classroom, etc. It also includes, perhaps improperly in

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[6] Miller, Henry S., *op. cit.*, p. 20.

some instances, any presumable lack of adaptation of the work to the ability of the student.

D. Those reasons which might be termed "outside events," beyond the control of the student, or of sufficient importance to indicate that withdrawal was apparently not due to any of the causes enumerated in "A". In this group we find those who had changed jobs and no longer had need for the subjects which they were taking in night school, those who left to get married, those who had selected some definite outside activity such as the study of music, etc. Some of these might have been influenced by lack of interest, but in the interviews they claimed that this was not the case.

E. Illness and poor health of the individual. This includes cases in which the student was forced through illness to be absent for more than two weeks. In instances where illness was given as the reason for withdrawal, and it caused absence for not more than two weeks, the reason is classified as inertia. The argument for the selection of this time limit is as presented under "B".

F. Home obligations. Here are included such factors as illness in the family, death in the family, and the necessity for helping in the home.

G. Cases which indicate a conclusion on the part of the student that he was not getting sufficient compensation for the time and trouble of attending evening school. This includes those in which the student decided that the work would be of no use to him, or that it was not of the type desired. They do not involve criticism of the school, although the latter might have been at fault; nor do they imply on the part of the student any of the reasons given in "A".

H. Instances in which the student had either finished the work of the year, or had attained the objectives for which he had registered.

I. Specific happenings related to the school life of the individual, but which do not seem to have been due to weakness in the school itself. Thus are found here the case of the boy who dropped out of an art class because a cover-design which he had made for the school magazine was not accepted; and that of

another boy who had lost a ticket for a series of lectures, which he had borrowed from the teacher.

J. Financial reasons.

K. Returned to day school.

The statistics are presented in Table LX and in the more detailed classifications given below. Although in some instances combinations of reasons were given, in the compilation of these data only one cause has been assigned to each individual, that being what appeared to be the dominant one. The interviews seemed to furnish a satisfactory basis for this discrimination because in each case where a complex answer was received, subsequent questions were directed toward a selection of the most important reason for elimination.

A—The Individual

1. Inertia	17
2. Got tired of it	14
3. Not interested sufficiently	14
4. Because somebody else stopped	13
5. Social affairs	9
6. Other interests (incidental)	9
7. Didn't like it	3
Total	79

Those students who left because somebody else stopped have been included here in cases where the attendance of the other individual was not vital to the attendance of the one interviewed. A few instances in which the withdrawal of the second person made a long, lonely trip necessary have been classified under D4.

The three students who said they didn't like the work of the school, have been placed here because they had no criticism to offer. If they had definitely criticized the school they would have been placed under C.

Inertia includes those who seemed to lack the ambition to continue. Some of them had no particular reason for leaving, but the majority had been out a few nights for some reason and then didn't feel like returning.

B—Industrial

1. Overtime	28
2. Night work	21

TABLE LX

Reasons for Leaving the Public Evening High School

Reasons	Ind.		H. E.		E. C.		Acad.		Com.		P. E.		Totals			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.	Per Cent
A. The individual	10	0	0	17	1	1	7	3	7	27	1	5	26	53	79	26.3
B. Industrial	10	1	0	5	6	3	15	3	12	9	0	0	43	21	64	21.2
C. School	5	0	0	6	1	1	5	2	3	19	0	1	14	29	43	14.3
D. Outside events	8	0	0	6	2	1	6	0	2	11	0	0	18	18	36	12.0
E. Illness	2	1	0	6	1	0	3	0	4	8	0	3	10	18	28	9.3
F. Home Obligations	0	0	0	5	1	1	3	1	1	4	0	2	5	13	18	6.0
G. Inadequate return	4	0	0	0	0	0	1	1	2	3	0	0	7	4	11	3.7
H. Objectives attained	1	0	0	1	0	0	1	0	1	5	0	1	3	7	10	3.3
I. Events related to school	2	0	0	0	0	1	0	0	0	1	0	0	2	2	4	1.3
J. Financial	2	0	0	1	0	0	0	0	1	0	0	0	3	1	4	1.3
K. Return to day school	2	0	0	0	0	0	0	0	0	2	0	0	2	2	4	1.3
Totals	46	2	0	47	12	8	41	10	33	89	1	12	133	168	301	100.0

3. Working late	7
4. Late hours, fatigue, and distance	6
5. Out of town on work	2
Total	64

C—The School

1. Work too difficult or too fast	13
2. Classes combined and didn't like the second teacher	10
3. Work too elementary or too slow	9
4. Poor teaching	6
5. Poor discipline in class	2
6. No complete course offered	1
7. Not enough equipment	1
8. Work of no practical use	1
Total	43

D—Outside Events

1. Moved outside of city	8
2. Obtained new position which changed objective	6
3. Moved to distant part of city	5
4. Somebody else left	4
5. Interested in or working at music	3
6. Started to attend another school	3
7. Left to be married	2
8. Left to study for civil-service examination	1
9. Was taking part in amateur play	1
10. Became president of a club	1
11. Sold his automobile and no longer had interest in auto mechanics	1
12. Joined army	1
Total	36

The 8 students who had moved outside of the city and 3 of those who had moved to other parts of Philadelphia, were not interviewed personally. In all there were 10 who were reported to the interviewer as having left the city, and 4 who had moved to distant parts within the city. It was considered wise, from the standpoint of comparative percentages, to include in this study of personal interviews a proportional number of those who had moved, and classify the remainder among the interviews with relatives, reported later.

E—Illness and Poor Health

1. Illness	25
2. Physical inability to work during the day and go to school at night	3
Total	28

F—Home Obligations

1. Illness in the family	10
2. Necessity for helping at home	5
3. Death in family	3
Total	18

G—Inadequate Return

1. Student felt that the material would be of no use	3
2. Material not of type desired	3
3. Went to another school to get the work better or faster	3
4. Decided that the school had nothing more to give him	2
Total	11

These students did not criticize the work of the school, but they had simply decided that they could do better in a private school organized for special needs, or that the material which they were taking would be of no practical use to them.

H—Objectives Attained

1. Went merely to brush up on work and stopped when this had been accomplished	6
2. Had completed the work assigned for the year	4
Total	10

Most of those who went to brush up on work were commercial students who were taking stenography.

I—Events Related to the School

Total	4

The subdivisions here are of single frequency each and hardly worth singling out.

J—Financial

1. Could not afford to purchase books for class	3
2. Could not afford material in dressmaking class	1
Total	4

The prices of the books which these three students were unable to afford were $2.75 in two cases, and $2.50 in the other.

K—Returned to Day School

1. Lost position and returned to day school	2
2. Gave up position to return	1
3. Forced back by law (under age)	1
Total	4

Individual Illustrations

Mere tabulation as a means of presenting an adequate picture of evening school elimination leaves much to be desired. It conveys nothing of the degree of sincerity with which the responses were given; nor does it show the complexity of individual answers, or the extent to which details were furnished. For these reasons it seemed worthwhile to include here some of the explanations given by individual students as to why they left evening school. These have been selected for their variety and suggestiveness, rather than as types of the entire group of responses; and because of this they are more complex as a group than was generally the case.

The selected illustrations follow as nearly as possible in the way in which they were received from the student:

1. Left because he felt that he was putting on too much weight, so decided to go to another public evening high school and enter the physical education class. When asked why he did not transfer within the same school he said that he had a friend in the other gym class.

2. She said that she worked hard during the day and was on her feet all day, so she got tired of going to night school. However, as long as her boy

friend continued to transport her back and forth each evening in his automobile she attended school, but when he stopped she quit too.

3. The reason for his leaving school was that he had a steady girl and she objected to his spending three evenings a week in school. When asked what he intended to do the following year he said that he had stopped going with the girl, and would return to school.

4. Was taking chemistry and found it quite interesting. Then he decided to make some alterations in the home and that kept him out of school for a couple of weeks, and he said that he didn't feel like returning. He also remarked that he liked to go to dances and the school interfered. On the questionnaire this individual had stated that he was attending school for "health and personal satisfaction". When questioned as to how he thought that chemistry would supply these needs, he answered that he had been in an argument about gunpowder and he took chemistry to learn the truth. Moreover he felt that the forty-five-minute walk to school and back each evening would be good for his health.

5. This girl said that she went to improve her English; but she didn't like it, and it took too much of her time, and didn't do her any good anyhow.

6. This girl said that on several occasions she had started for school, but when she got to the avenue and saw the billboards in front of the movie houses she decided that she would rather see the pictures. In this way she got out of the habit of attending school.

7. Got tired of going. She had intended to go only until the holidays but was out a few weeks before that time for social reasons, and didn't bother going back. Then, too, she had to work late some evenings.

8. Was working night work for about two weeks and then started going to the dentist. One night later he returned to school and found that the class had been consolidated with another class, so he didn't go in. He said he looked in and saw mostly strangers. Reaction to the school good. He had dropped out once before, giving his work as the reason that time.

9. He said that he stayed out to play basketball, but he didn't like school much anyhow. It became too difficult for him and there were plenty of things which he couldn't understand.

10. Liked the work but said that he wanted to be out in the open air on nice nights. When asked if he didn't think that the evening school would repay him for being indoors he replied that he was young yet and had plenty of time to learn what he needed.

11. This boy and his girl friend attended the same class, and she had been instrumental in getting him to register. He said that he had left because he had been working overtime for about three weeks and then the girl had been confined to her home through illness, so that instead of returning to school he had been going to see her.

12. According to this girl her work did not actually prevent her attendance at night school but it made it necessary for her frequently to go in late. Although the teacher did not complain the girl said that she didn't like to interrupt the class so often.

13. This boy worked late and often got into school late on this account, with the result that he was missing a considerable amount of the first period. Since it was the work of the first period (typing) in which he was particularly interested he decided to stop. He was not interested in the work of the second period (stenography), because he didn't see much use for it in his work.

14. Ill for a time and too fagged out to attend school. She said that she thought the work of the class too slow, but she was interested enough to continue if it hadn't been for her physical condition. She had not been forced to stay home from her daily work but claimed that she was not fit to attend school.

15. He said that the principal reason for leaving was that he had been ill about three weeks, although previous to that time he had been missing every Monday evening to attend meetings of the National Guard, and that on some nights he had to work overtime. He had dropped out once before because of illness.

16. These people were very poor. The family consisted of an aged mother and two sisters, both of whom were attending evening school. The girls supported and took care of the home. The girl who was interviewed said that she had left school because her mother had become ill and after that she herself had been ill. Then to earn more money she had brought work home from the mill where she was employed. She liked the school work so much that she often attended extra evenings, and signified her intention of returning the following year at the end of which she would be entitled to a certificate.

17. This girl had a sister who was attending the same class with her. Their parents kept a retail grocery store and when the mother became ill the girls had to take turns helping in the store. Moreover the father insisted that they make certain missions and novenas in the church. The first of these reasons seems to have been the real factor in the elimination of these two girls from school, although the latter might have operated to prevent their return later in the year. Each of the girls had attended regularly for three years previously.

18. His child died and his wife became ill, so that he had to leave school and stay home with her. Before that he had been working on a night shift but had been attending school, because by leaving school early it was possible for him to get to work on time. He seemed very earnest.

19. Because her mother was dead and she had to take care of the house, and because of the distance from the school, this girl was unable to attend evening school.

20. This woman's husband had been away for a few months because of his health and she had taken night school work to keep her mind occupied, and at the same time to learn something which would enable her to help him in his real estate business. But he returned home about Christmas time and she had to stay at home to take care of him.

21. Liked the work but wanted a complete course. He said that the school offered a little of this and a little of that with no chance to follow any course through.

22. The classroom work was all right but in the shop it was too crowded. There were two classes in there and not enough tools, and the other class got the preference. Got disgusted. This man stated also that his brother had stopped for the same reason.

23. This woman was married and had two children, who were attending dancing school on the same night that her physical education class met. She said that since it was necessary for her to accompany the children she had to give up school herself.

24. Was not getting anything. He said that the teacher knew his stuff, but didn't know how to teach it. He added that at the time he himself was interested in boxing and that helped to take his mind off the evening school work.

25. This woman left the cooking class because she was not getting anything except how to make coffee, etc., which she already knew. She wanted to know how to prepare balanced meals, special meals for guests, etc. She said that she was also in a dressmaking class which she enjoyed very much, but owing to decrease in numbers this class was discontinued and the teacher who was very efficient was discharged. She was then put in a class with another teacher who seemed to have no interest in the students so she got disgusted and quit.

26. In the beginning of the year this girl had entered a music course but found that it was not for absolute beginners such as herself. Then she changed to a class in millinery and novelties, but her mother persuaded her to leave because she said that you could buy things like that for less than the material cost.

27. Left because there were a couple of bright fellows in the English class and they took all of the teacher's time with questions and arguments, most of which he could not understand. Added to this he had a speech defect. He said that he got along well enough in arithmetic but that he thought the English was too advanced for him.

28. Wasn't getting anything out of the evening school. She liked the teacher but said that there was too much noise and lack of interest in the class. She had stopped the previous year because the classes were con-

solidated and she couldn't get along with the second teacher. Incidentally this was the same teacher whom she said that she liked this year.

29. There was something new every night and he found it difficult to keep up with the class, and as a result he lost interest. He said that he really didn't like the subject (bookkeeping) much anyhow, but it had been suggested by his employer.

30. This boy was taking hosiery knitting in evening school. During the year he secured a job in a hosiery mill and after working there for about a week he decided that he didn't like hosiery work so he couldn't see any reason for continuing in school. Said that he really liked the evening school work.

31. Had left evening school because he had moved to a distant part of the city where he had resided for about two months. He said that he didn't care much for the work at school but he wouldn't have stopped if he hadn't moved.

32. Got another position and was working hard and was tired at night. Besides she was attending another commercial school in the day time. The night school work was in line with her daily work before the change of positions but not after, so she stopped.

33. It took this girl forty-five minutes to ride to school by trolley and she had to take two cars. Added to this she was working until six o'clock in a hosiery mill. In spite of these conditions she said that her real reason for leaving school was that her friend left. They had been going to school together.

34. This girl was still a student in a day high school. She said that she left night school because she didn't have time to prepare homework and tests for the day classes. She added that she didn't like the evening school work much anyhow because there was too much noise in the class.

35. This boy left evening school to study for an examination as railway mail clerk. Actually he said that he hadn't gone through with his project because he found it too difficult. He had been taking English and arithmetic but the arithmetic class had been scattered among other mathematics classes and he had landed in an algebra class. He stated that he had found this too difficult and had dropped the mathematics even before he had discontinued the school entirely.

36. Had reached a point where he felt that he had obtained as much as he could in the public evening high school, and other interests were taking his time. He was a graduate of the day high school and was in his third year of night school.

37. The work was not what she wanted. She worked in a banking house and there she was being taught bookkeeping of a type which was peculiar to that business. It was altogether different from that which she was getting at school.

38. This boy was taking bookkeeping and he said that he didn't expect it to do him much good. That in addition to the fact that he often worked overtime caused him to withdraw from the evening school.

39. This girl was in a dressmaking class. In December she lost her position and was then unable to purchase material with which to work. She said that she hated to see other girls with good stuff which she couldn't afford to buy. It developed that she had registered under the name of her sister who had been attending the same evening school for a couple of years. The reason for this deception was not clear.

40. Merely went to brush up on bookkeeping and when she had to work late several nights she decided to quit because her objective had been attained. She suggested to the writer that short speed courses should be given in the public evening high schools in bookkeeping, stenography, and typing.

41. She was busy in the office where she worked, her mother was ill, and she herself was going to the doctor. She felt that it would be better not to attend evening school under the circumstances.

42. Felt that his daily work would interfere with evening school attendance later in the term, so decided to quit. When interviewed he stated that actually it would have been possible for him to have attended throughout the year, insofar as the daily job was concerned. Worked on the railroad.

43. Was sick for a time and on two evenings when he had started for school he said that he got part way and saw that he was going to be late so decided to go back home. After that he didn't bother returning at all. He worked on a milk wagon in the early morning and was in the habit of sleeping in the afternoon. Said that on the two occasions mentioned he had overslept.

44. Had too many social engagements and liked to go out of an evening. Said that he was not much interested in going to school and would never have started if his employer hadn't been at him to go.

45. Was feeling under the weather for a few weeks. Not really ill enough to be home from work but feeling under par. Then he didn't like to return to school after missing. He guessed that it was just laziness.

46. This woman was in a cooking class and left because she felt that the supplies needed were too expensive. Since she and her husband were both employed and they were living with his parents it did not really seem to be a matter of inability to purchase the supplies.

47. Worked in a hosiery mill and the entire mill went on strike. The strike lasted for several weeks and during that time she said that she lost all interest in evening school.

48. Left because she got tired of it. She said that she was working on clothing all day and taking dressmaking at night school. For several evenings she had "bagged" school and when the mother discovered this she made her stay home at night.

49. She worked in a bakery and ice cream store during the day and said that she was very tired when she went to night school. She liked the work but the warm school room made her sleepy.

50. She said that she had no special reason for leaving night school except that she wasn't much interested. She had expected more dictation in the stenography class and didn't feel like spending three evenings each week on what she was getting.

51. No special reason for leaving. She said later that she guessed it was because her girl friend left.

52. This girl said that the teacher had assigned work to be done over the holidays and that she hadn't done it, so she didn't return after that time. Her reaction to the school seemed good. Once before she had dropped out because she had been obliged to work overtime.

53. His attendance was irregular because of social affairs and some overtime work, so he decided to quit. Claimed to be well satisfied with the work which he had been taking at school.

54. The class dwindled and she felt strange and didn't want to go any more. However, she said that she enjoyed the work. Once before she had dropped out because of illness.

55. Left because his friend did and he was tired of going, although he said that the work was all right.

56. Had stopped attending evening school because he had been working overtime at his trade of cabinetmaking. He was also a musician and because of this had been absent from school some evenings, but he claimed that if it had not been for his work he wouldn't have dropped out. He was very enthusiastic about the school and the teacher.

57. Because of his work he was often getting to school late and often not at all. For this reason he stopped with the intention of reentering for the second term in January. Since he did not like one of his subjects (stenography) he contemplated changing at that time. But he thought that the second term began in February so that he found himself a month late when he sought to go back. The result was that he didn't go back at all.

58. The family moved early in February with the result that the girl was then living at a considerable distance from school. This would have been all right but she said that she had to prepare dinner for her brothers, and that made it impossible to get to school on time.

59. Was taking English and arithmetic. He remarked that he liked the work but it really was too fast for him. Then when some of his friends stopped going he decided to quit too.

60. Classes had been consolidated and she said that she didn't like the second teacher's methods. She got along well with the first teacher. Early

in March she had been making a mission in church, but claimed that this had not been the cause of her leaving, although she did leave at about that time.

The Reasons for Leaving the Public Evening High School as Determined by Interviews with Immediate Relatives of 81 Drop-outs in Philadelphia

These are cases in which the student was not at home when the writer called, and as a result some other member of the household was interviewed. Usually this happened to be the father or mother, or both.

The results of these interviews are presented in Table LXI in which the divisions are similar to those given in Table LX.

TABLE LXI

REASONS FOR LEAVING EVENING SCHOOL ACCORDING TO IMMEDIATE RELATIVES OF DROP-OUTS

TYPES OF REASONS	NUMBER	PERCENT
A. The individual	27	33.3
B. Industrial	24	29.6
C. The school	4	5.0
D. Outside events	7	8.7
E. Illness and poor health	9	11.1
F. Home obligations	6	7.4
G. Inadequate return	2	2.5
H. Objectives attained	0	0.0
I. Events in school	1	1.2
J. Financial	0	0.0
K. Return to day school	1	1.2
Totals	81	100.0

The percentages given in this table show fairly close agreement with those of Table LX. As might be expected however, there is less criticism of the school and also less mention made of outside events; but reasons related to the individual, those arising out of the daily job, and illness, are of increased prominence. There are not enough cases to warrant general conclusions, but these statistics serve a purpose in the extent to which they support or refute the findings presented in the preceding table.

Individual Illustrations

The wide variety of the types of response received is indicated by a few of the more interesting cases which are here included.

1. His brother said that he made good money, and was worried because when he went to school he had no chance to spend any of it.

2. Liked to sleep of an evening when he came home from work. Interviewed mother.

3. Was ill and stayed home for two weeks. Then she felt too tired after working all day to attend school at night. She had only gone for something to do anyhow.

4. Changed her job in the hosiery mill and had to stand on her feet all day. Then her mother said that she was too tired to walk to school and didn't like to spend the money to ride.

5. He was going with other boys and "bagging" school. He had told his mother that evening school stopped for the year at Christmas time. She was the one who had urged him to go. Interviewed mother.

6. When the writer attempted to interview this boy the latter was not at home, but an interview was held with the mother, father, and sister. The mother said that he had left because of laziness but the sister said that his work had interfered. In the discussion which followed the mother seemed the more convincing of the two, and the father added his support to her argument.

7. The mother said that studying wasn't in him. She added that she and his father had pleaded with him, and the employer encouraged him in every way, but to no avail.

8. His father said that he had been giving the boy money every night to go to school, and he didn't know that he had been "bagging". He said that the boy had stopped going once before because he claimed that he knew all that was being taught in the class.

9. Overtime was causing him to get into school late and often he missed the entire first period. In this way he was missing considerable mathematics, a subject in which he was weak at best. Interviewed mother and father.

10. Was seriously ill and couldn't work. Then he had lost his position and had returned to his home in Binghamton, N. Y. Interviewed man with whom he had boarded.

11. Was just married and his wife didn't want him to go to night school three nights each week. Interviewed sister and mother.

12. The arithmetic class which he had been attending was scattered and he was put in an algebra class. Since there were two classes in one he didn't get much attention. Interviewed sister.

13. This boy was a hosiery knitter and was taking architectural drawing at night school. After a time he realized that the school work would be of no use to him. He had dropped out once before because he was more interested in the violin. Interviewed mother and sister.

Conclusions

In general there seem to be two outstanding types of reasons for leaving the public evening high school: (1) those which relate to the individual, and (2) those for which the daily job is responsible. It is probable that some of the reasons charged against the individual really have their origin in shortcomings of the school, but the probability seems greater that to the first of these groups should be added some of the responses which were classified under "outside events". Moreover, five drop-outs who claimed fatigue due to work have been included under "industrial" whereas the fatigue might as readily be ascribed to the attitude of the individual as to the job. On the whole it appears that the percentage of cases (26.3) listed under "the individual" is more likely to be too low than too high.

Generally speaking, those who claimed that their elimination was due to work or illness seem to have been rather definitely classified; but the percentage (14.3) given for "reasons due to the school" might be too high, in spite of the statement of the preceding paragraph. As mentioned before, this group contains those who said that they had stopped because the work was too difficult or too easy, which might or might not have been the fault of the school. These constitute exactly one-half of the 14.3 per cent.

The other percentages are small and there are no indications that they deviate significantly from the truth. The responses which they contain are of relatively definite character.

It is interesting to compare the results of this study with those secured by O'Boyle[7] and Miller.[8] These comparisons are presented in Table LXII, in the compilation of which it has been

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[7] O'Boyle, John, *op. cit.* (unpublished).
[8] Miller, Henry S., *op. cit.*, p. 51.

necessary to reclassify the results of the other two investigations on the basis which has been used here. So that the reader can follow this reclassification, letters have been inserted on the right of Tables LVIII and LIX showing the new assignments of the divisions and subdivisions used by O'Boyle and Miller.

TABLE LXII

COMPARISON OF REASONS FOR ELIMINATION OBTAINED IN THIS STUDY WITH THOSE SECURED BY O'BOYLE AND MILLER

	O'BOYLE	MILLER	THIS STUDY
	PERCENT	PERCENT	PERCENT
A. Individual	13.7	20.7	26.3
B. Work	23.8	43.8	21.2
C. School	9.3	11.6	14.3
D. Health	11.5	4.3	9.3
E. Home	12.2	2.9	6.0
F. Outside events	26.6	12.9	12.0
Miscellaneous	2.9	3.8	....
Other divisions	....	....	10.9
Totals	100.0	100.0	100.0

When it is remembered that these three sets of interviews were conducted by different individuals, classified originally according to different criteria, and that they deal with more or less different types of pupil personnel; it is not strange that there should be disagreement between some of the percentages given in the table. And yet there is enough general harmony between them to give rise to the conclusion that they are mutually supporting rather than antagonistic to each other.

Reasons Given in Questionnaire for Previous Withdrawal

In question 19 of the questionnaire the students were asked to state whether or not they had ever dropped out of evening school before, and in question 19a they were to give the reasons. This latter question was included in the hope that it would shed additional light on the study of elimination. As a result a total of 444 students gave reasons for previous elimination from evening

school, but because these responses were not given in sufficient detail to warrant correct interpretation, it was considered unsafe to classify and present them. Moreover, the group was a selected one from the standpoint of elimination. It included only those who had returned to school. Another fact considered was that the elimination had taken place in a large variety of schools, private as well as public.

IX

SUMMARY AND CONCLUSIONS

The general organization of this chapter is in accordance with the outline of the problem which is presented on page 20.

A Survey of the Public Evening High School Group

These conclusions are based upon information supplied by 3,813 students who were in attendance on November 19, 1929, in four public evening high schools of Philadelphia. The data were secured by questionnaire.

1. The median chronological age of the public evening high school group is 19.61. There is little difference between males and females in this respect, but pronounced age differences exist between certain course groups. Commercial students have the lowest median, 18.77; while those in the English and citizenship classes have the highest, 24.27. Of the entire group, 54.4. per cent are in the 15 to 19-year category, and only 8.4 per cent are 30 years of age or more. (Tables XIX, XX, Fig. 1.)

2. The age level of the colored students in this study is considerably higher than that of the entire group under investigation. The median for the colored males is 27.00, and for the females 23.92. (P. 62, Table XXVI.)

3. Only 13.8 per cent of the total male group are married, and of the females only 11.3 per cent. These percentages vary from 2.2 in the case of the commercial females, to 41.7 for the English and citizenship females. In a general way these variations follow rise and fall of age level. (Table XXIX.)

4. Approximately three-fourths of those who have received their day school educations in foreign countries are to be found in the English and citizenship classes. (Table XXX.)

5. With the exception of those in the English and citizenship classes only a very small percentage (3.6) of the students have difficulty in understanding conversational English. (Table XXXI.)

6. Of the entire group: 56.3 per cent walk to school; 33.4 per cent travel by trolley, bus, or elevated; and 10.3 per cent come by automobile. The percentages of males and females who walk to school are exactly the same, but the former use automobiles to a greater extent while the latter make more use of public conveyances. (Table XXXII, Fig. 4.)

7. Most of the students are within easy traveling distance of the public evening high schools of Philadelphia. Of the total number, 32.1 per cent get there in 5–10 minutes, and only 24.5 per cent require more than 20 minutes. Only 4.9 per cent spend 35 minutes or more in getting to school. (Table XXXIII, Fig. 5.)

8. Contrasted with the female group, the males put in more time on the daily job. Considering the entire group, from starting time until stopping time: 5.5 per cent spend less than 8 hours, 32.3 per cent spend from 8 hours to 8 hours and 45 minutes, 43.4 per cent from 9 hours to 9 hours and 45 minutes, and 18.8 per cent are engaged for 10 hours or more. These results do not include housewives or those engaged in housework. (Table XXXIV, Fig. 7.)

9. Approximately one-fourth of the students expect their daily work to interfere with subsequent attendance at evening school, the males being more handicapped in this respect. This seems to point to the potency of industrial reasons for elimination. (Table XXXV.)

10. Considering the last grade completed in day school, the median for the male group is 8.77, and for the females 9.52. The physical education females have a higher median than any other group, 10.92; but if both sexes are included the commercial group has the best record; 9.61 for the males, and 10.00 for the females. (p. 87.)

Because of the variations which exist care must be taken in the interpretation of conclusions such as these. Thus the educational range of the entire group is from the 3rd grade to the 2nd year of college; and in every course group except that of the industrial males, the distribution of the middle fifty per cent extends over more than two years. (p. 87, Table XXXVI, Fig. 8.)

11. With the exception of those who leave day school at the

age of sixteen, and to a less extent those who leave at fifteen, the public evening high school students register normal progress in day school. On the whole there is little evidence of retardation. (Table XXXVII.)

12. Approximately three-fourths of all the public evening high school students have left day school because of financial inability to continue, or because of a desire to work. The information on which this conclusion is drawn is by its very nature subject to a certain degree of unreliability. (Table XL, pp. 94–103.)

13. More than half of the entire group of public evening high school students have never before attended evening school, and more than three-fifths of the total have never before completed as much as one year of evening school work. In this respect males and females show about the same results. This heavy annual turnover seems to indicate a need for more definitely organized courses extending over periods of more than one year. (Table XLI, Fig. 10.)

14. The reasons for attending the public evening high school appear to be significant only in the light of the courses which are being considered. Almost half of the industrials seem to be attempting to equip themselves for some different kind of work, and about one-sixth of the commercial females appear to be actuated by the same motive. In the clothing classes 13.3 per cent say that they are trying to learn a trade or job. Approximately two-thirds of the academics are interested in improvement of education, and a majority of the commercial students are about equally divided between this and advancement at work. A majority of the physical education people are attending for improvement of health. These conclusions might be open to question because of the comparatively low degree of verification secured in the interviews; and because of the fact, determined also by the interviews, that a large number of those who attend the public evening high school are motivated by a combination of reasons. (Table XLV, Fig. 12.)

15. Only 1.9 per cent of the students feel that the subjects which they are taking are not the proper ones for their purpose, while 7.6 per cent are undecided. The interviews too disclosed the fact that there is comparatively little dissatisfaction with the subjects which are being taken. (Table XLVI.)

16. In 80.8 per cent of the cases the students select the subjects themselves, 14.9 per cent are advised by somebody outside the school, and only 4.3 per cent are influenced by school officials. This would seem to indicate that guidance does not function to any great extent in the public evening high school, but the fact that the students themselves are subsequently satisfied with the selection of subjects is worthy of consideration in this connection. (Table XLVII.)

17. Almost three-fourths of the entire group signify their intention of returning to school the following year, and practically all of these intend to return to the same school. Thus apparently not many are dissatisfied with the school, which conclusion is supported by the results of the study of reasons for elimination. Considered in connection with the fact that more than half of the public evening high school students have never before attended evening school, one notes what appears to be a tremendous gap between intention and performance. (Table XLVIII.)

18. Only 0.7 per cent of the students feel that the work which they are taking is too difficult for them, and only 2.3 per cent consider it too easy. If these figures are reliable the implication is that the work of the public evening high school is well adapted to the ability of the student. The study of the reasons for elimination points to the same general conclusion, but tends to indicate that these percentages are too low. (Table XLIX.)

19. About three-fifths of the male students, and half of the females, are attending the public evening high school with the employer's knowledge. Approximately one-fifth of each group are not certain whether or not the employer knows of their evening school activity. (Table L.)

In 83.4 per cent of the cases in which response was made, the employer encouraged the student; and to only 2.3 per cent of the students was discouragement given. These figures lead to the belief that the attitude of the employer is, on the whole, favorable to the work of the evening school; but the encouragement which is offered often seems to be of a passive variety. (Tables LI, LII.)

20. In a majority of instances the evening school is first suggested to the student through somebody else in the family, or by a friend. About one-sixth simply say "Myself" when asked what

first suggested evening school to them. Posters, newspapers, teachers in day school, and employers, seem to have relatively little influence in this particular activity. Because of the difficulty many have of recalling the medium which first attracted them, the figures probably furnish only an approximation of the truth. (Table LIII, Fig. 13.)

21. A majority of the academic students, and approximately three-eighths of those in the industrial, home economics, and commercial classes, are in favor of having home work to do over the week-ends. (Table LIV.)

22. The great majority of industrial, commercial and academic students are desirous of having tests on the work as it progresses. (Table LV.)

23. In order of frequency the three most prominent reasons for absence of male students are: overtime, social engagements, and personal illness. For the females, the same three are the most important reasons but the order is different: personal illness, social engagements, and overtime. These are also prominent reasons for elimination. (Table LVI, Fig. 14.)

24. As determined from the study of 339 cases the median of intelligence of public evening high school students is 95.1, and the mean 94.4. The distribution of the middle fifty per cent is from 86.3 to 104.1. (Fig. 17.)

Comparison of Stay-ins and Drop-outs on Basis of Facts Obtained in Survey

1. Among the males there seems to be no pronounced relationship between chronological age and persistence, but in the female group there is a definite increase in persistence-percentage with increase in age level. (Fig. 2.)

2. There appears to be no appreciable difference between the staying qualities of the males and females in toto, but in certain course groups the differences are quite definite. (Fig. 2.)

3. Colored students apparently persist better than the whites. However, only 113 of the former were included in this investigation. (Table XXV.)

4. Unmarried males show a slight superiority over married

males from the standpoint of persistence, but among the females there appears a very definite superiority in favor of those who are married. Of all groups the married females have the best record, with the unmarried males a poor second. The other two groups show results which are about the same. (Table XXIX.)

5. Students who have received their day school educations in foreign countries, but who are not in the English and citizenship group, have an extremely high persistence-percentage. There are however, only 122 of these in the study. Students in the English and citizenship classes show slightly better qualities of persistence than are to be found in the public evening high school group generally. (Table XXX.)

6. Those who claim to have trouble in understanding English, and who are not in English and citizenship classes, seem to persist about as well as those who do not experience such difficulty. Only 124 of the former are included in this investigation. (Table XXXI.)

7. In both the male and female groups the number who walk to school show only slightly better persistence than those who use public conveyance. The least satisfactory performance, in both groups, is furnished by those who travel by automobile. This is particularly true of females. (Table XXXII.)

8. Within the limits of this study the time taken to get to evening school does not seem in general to bear a direct or inverse relationship to persistence, but among both the males and females the 15–20 minute group show less persistence than either the 5–10 or 25–30 minute groups. (Table XXXIII, Fig. 6.)

9. There appears to be no definite relationship between regular hours of daily work and persistence. (Table XXXIV.)

10. The persistence-percentage of those who state that they expect their daily job to interfere with subsequent attendance is extremely low for both sexes. (Table XXXV.)

11. The general tendency seems to be for persistence in evening school to vary inversely with grade completed in day school. (Table XXXVI, Fig. 9.)

12. Of those who leave day school at the age of 14 the most advanced in grade persist better in evening school, but the reverse of this is true for those who leave at 16 or over. Of those who

leave at the age of 15 the middle group have the best record. (Table XXXVII.)

13. Those who leave day school because they dislike it appear to persist in evening school to an exceptional extent. This observation, however, is based upon only 150 such cases. Otherwise there seems to be no definite relationship between reason for leaving day school and persistence in evening school. (Table XL.)

14. On the basis of previous evening school experience the general tendency seems to be for the persistence-percentage to increase as one passes from group to group as follows: previous drop-outs who have never completed as much as one year in evening school; those who have never had any previous evening school experience; previous drop-outs who have completed one or more years of evening school work; those who have completed one or more years of evening school and have never dropped out. (Table XLII, Fig. 11.)

15. The 68 students in this study who felt that they were not taking the proper subjects have an extremely low persistence-percentage, but the difference between those who were satisfied and the others who were not certain is almost zero. (Table XLVI.)

16. Those influenced in the selection of their subjects by somebody in the school seem to persist better than those who make their own selection or are advised by somebody outside. The difference between the last two groups is insignificant. Those influenced by somebody in the school number only 146 cases. (Table XLVII.)

17. There is a very pronounced difference in persistence-percentage in favor of those who intend to return to evening school the following year, as against those who do not expect to return. The undecided students have a low percentage of persistence. (Table XLVIII.)

18. There are not a sufficient number of those who feel that the work is too difficult or too easy for them, to warrant conclusions as to their persistence qualities. (Table XLIX.)

19. Among the females those whose employers know that they are attending evening school persist to a greater extent, but in the male group this seems to make no difference. Students who are

encouraged by their employers do not appear to persist as well as those who are not encouraged, but this finding involves only 279 of the latter. Those discouraged by employers seem to be too few for consideration. (Tables L, LI, LII.)

20. From the standpoint of persistence the order of effectiveness of the various media which first suggest evening school to the student are: newspapers, employer, somebody in the family, teacher in day school, friend, and posters. Probably the most significant fact in this connection is that those who are influenced by somebody in the family have an appreciably better record than those who are motivated by friends, because together these two groups seem to account for about three-fourths of all students. (Table LIII, Fig. 13.)

21. Those who desire homework show great superiority in persistence in both the male and female groups. (Table LIV.)

22. Among the females those who want tests persist much better than the others, but in the male group there seems to be no relationship between a desire for tests and persistence. (Table LV.)

23. A comparison of the intelligence distribution of stay-ins with that of drop-outs shows only insignificant differences between the two. In general it appears that intelligence is not related to persistence. (Fig. 17.)

Relationship Between Absence and Elimination

In the main the tendency is for public evening high school students to withdraw more abruptly during the early part of the school year. The probability of elimination after any given number of consecutive absences decreases as the school year advances. Thus after three consecutive absences the probability of elimination is 60 per cent during September and October; 49 per cent during November and December; and 34 per cent during January, February and March. These probabilities decrease in about the same way after any given number of consecutive absences, but increase with the number of absences under consideration. For example, out of 1,165 cases of single absence in September-October, 185 fail to return thereafter, or approximately

one out of every six; but when the absence extends over two consecutive evenings the probability of elimination is 46 per cent, and for three evenings it increases to 60 per cent. (Table XVII.)

Reasons for Elimination from the Public Evening High School

There seem to be two outstanding types of reasons for elimination from the public evening high school: (1) those which arise out of inertia, lack of interest, or some other manifestation of unwillingness on the part of the student to make the sacrifice which attendance at evening school usually requires, and (2) those for which the daily position is responsible. These two types of reasons account respectively for 26.3 per cent and 21.2 per cent of the withdrawals. Following these in order of frequency are those reasons which have their origin in some weakness of the school or of the teaching; outside events in the life of the student which relegate the work of the school to a position of secondary importance; illness and poor health; and home obligations. (Tables LX, LXI, LXII.)

X

Observations

The following thoughts have arisen out of or have been suggested by the study at hand, and they are presented merely as observations which might merit consideration in connection with public evening high school procedure.

Guidance

Guidance has become recognized generally as a necessary feature of the day school program, and the need for it in the public evening high school seems to be equally pronounced. The reasons for this statement are:

1. There are wider variations of individual differences to be found in evening school groups, than in the classes of the day school. These are due to greater ranges in age, experience, and educational background.

2. The subjects which are offered in the evening school cover a more extensive range than those of the day school, and since most of the evening school students are not pursuing definitely outlined courses from year to year to fulfill requirements of the school, they enjoy almost unrestricted choice.

3. Evening school students register for a variety of reasons, and they themselves often do not know exactly what they hope to accomplish. Thus we find the bulk of the industrials taking courses which are not related to their daily work, in the hope perhaps of being able to change to different vocations. Many of the academics enter evening school with the vague feeling that they need more education, but it is not clear to them what type of study is best fitted for the purpose.

4. A considerable percentage of those registering for night school work are entirely unfamiliar with the road to be traversed in order to reach their objectives, and know little of what those objectives will mean, when and if attained. For several years the writer taught mathematics in the public evening high school, and

as a result came into contact with many students who were planning later to follow engineering courses in higher institutions. A few had analyzed the situation rather thoroughly and had outside contacts which would help them, but in a majority of cases there was a definite need for guidance. Many of these young men did not possess the mathematical ability for success in such a vocation, and most of them had exaggerated ideas of the opportunities which awaited the young engineer.

5. The time at the disposal of the evening school student is relatively more limited than is the case with the pupil in the day school. For this reason he must select his courses with even greater care.

6. The variety of causes for withdrawal indicates that the evening school student reacts as an individual, and not as one of a group. Effective guidance might be instrumental in keeping some of these people in school; particularly those who are absent for a short time through illness or work and then don't like to return, and those who are dissatisfied in some way.

All of these facts seem to point to the general conclusion that the need for guidance in the evening school is of no less importance than in the day school. This implies educational and vocational guidance, cooperation with employers, and placement service. It does not mean however, that advice is necessary for all students.

Cooperation With Employers, and Placement

It has been found in this study, and in the other investigations which have been reported[1], [2], that in general the attitude of the employers toward the evening school is favorable. In the portion of the study devoted to this topic it was argued that the evening school should, as far as possible, secure the cooperation of the employers; and mention was made of the work that is being done in Buffalo in this particular field, and in Philadelphia through the labor unions. Whether or not more intimate liaison between the employer and the school would in most cases be possible and desirable is open to question, but the mere fact that about one-fifth of the drop-outs in this study, and approxi-

[1] Marsh, C. S., *op. cit.*, pp. 55–57.
[2] Evans, Owen D., *op. cit.*

mately two fifths of those investigated by Miller, left because of industrial reasons, is indicative of the need for more detailed study of this field.

Closely linked with any program of cooperation between the school and the employer is the matter of placement. A service of this type would increase the prestige of the evening school and help to give direction to its efforts. It requires a very persistent type of student to attend night school for a long period of time with no other incentive than the satisfaction which accompanies self improvement. Certainly in cases where they meet the necessary requirements as to ability and training, there is no group of young people who could be recommended with more safety than those who attend evening school regularly after working during the day. During the interviews the writer was impressed by one case in particular; that of a girl who on the basis of a grammar school education, and two years in the South Philadelphia Evening High School, which was supplemented by considerable practice outside of school hours, had succeeded in obtaining a position as stenographer. At the time of the interview, which was during the following year, she had been promoted to a secretarial capacity. This girl appeared to have ability and determination, and her progress was exceptional; but not so extraordinary that many others could not have similar success if the way were pointed out to them.

Cooperation With Parents

There are three facts which suggest a consideration of this topic: (1) more than half of the students considered in the study are to be found in the fifteen to nineteen year age group; (2) approximately one-third of the entire number claimed that evening school was first suggested to them by somebody else in the family, the interviews showing that this usually meant the mother or father; (3) this particular group had a comparatively high persistence ratio. This might lead to the inference that if the active cooperation of the parents were secured to promote regularity of attendance, elimination could thereby be appreciably reduced. There seems to be a possibility of results from such effort, but it would be necessary to consummate a program of this sort without introducing the element of coercion. When

interviewing the drop-outs it was evident to the writer that for the most part the parents were desirous of having the boy or girl continue in school, but under the circumstances the effectiveness of their influence could not be determined. The opinion has frequently been expressed that many of the drop-outs are boys and girls who register for the sake of being able to get out of the house on evenings when school is in session; and that they cease attending soon after but forget to tell their parents. In the 301 interviews with drop-outs, at perhaps 100 of which parents were present, and in the 81 interviews with other members of the household, only five cases were noted in which the parents were being deceived in this fashion.

Registration

The evenings devoted to registration are busy and critical ones in the life of the evening school, and the efficiency of the work done at that particular time determines to a large extent the degree of success which the school subsequently achieves. Registration should be so conducted that it includes not only the formality of enrollment, but also reduces student misplacement to a minimum; and at the same time operates with a certain amount of discrimination in the selection of students, in general and for particular classes. This final statement needs explanation.

It is evident from this investigation that a large percentage of the registrants in evening school are of unstable type. They drift in on a temporary wave of enthusiasm or because some friend has signed up, and soon after disappear with equal abruptness. Their presence at the beginning of the year makes it necessary to organize the school on the basis of a large initial enrollment, and their subsequent irregularity of attendance and withdrawal devitalizes the work of the class, and finally leads to consolidation of classes, which it appears has a damaging effect upon the morale of those concerned. It is recognized that for the most part this type of student cannot be distinguished from the others at registration, and even if fairly accurate distinction were possible, one would not recommend that an attempt be made arbitrarily to reject such individuals. There are however, certain procedures

which in this connection seem practical. For example, those students who have dropped out before, early in the year and without adequate explanation, might be put to some slight inconvenience in registering; which would mean nothing to those who are serious, but which probably would separate out the most casual element. The effectiveness with which such an obstacle operates is illustrated by the following incident. In one school there were sixteen prospective students who could not be admitted to a certain type of shop work, because of lack of sufficient facilities; but they were told that in a short time it would be possible for them to enter. Within two weeks notices to this effect were mailed to these individuals and in only two cases was there any response. The writer is informed that in such situations this sort of reaction is not unusual.

Such emphasis has been placed upon ways and means of getting the adult into evening school that we appear to have sacrificed quality and to have encouraged irresponsible registration. This seems in part due to the haste and confusion which accompanies the usual method of registration, viz., the assignment of perhaps three evenings for this purpose with the class work starting immediately thereafter.

There is some difference of opinion as to whether or not this is really better than having the students register at some time previous to the opening of the school year. The principal complaint brought against the latter method is that if time is permitted to elapse between registration and the beginning of work, some of the registrants will never appear in class. This is probably true, and it would be unfortunate to lose worthwhile students in this way; but it seems logical to conclude that in the main the school would operate more efficiently without those of such temporary motivation. It might be good salesmanship to have a prospective customer sign on the dotted line before his enthusiasm has a chance to cool, but the task of the school is not so much to sell itself to the student as to keep this reaction alive throughout the remainder of the year.

In addition to this there are other advantages which would accompany early registration:

1. It seems to be the practice to open evening schools at the

same time as, or immediately after the opening of the day schools, and to devote a certain number of evenings thereafter to registration. Since this time of the year is more favorable for evening school attendance than are the weeks between Thanksgiving and Christmas it would be of advantage to start work immediately, and bring the Fall term to a correspondingly earlier close.

2. Registration if conducted over a longer period of time prior to the beginning of the school year could be handled in each school by committees trained for the work. There would be less haste and confusion and there would be better opportunity for guidance. The system of having teachers register for their own classes is faulty in that most of them are not familiar with the work throughout the school and in other schools, there is often an insufficiency of time for adequate help, and finally the teacher often has a personal interest in building up the class. Moreover registration by committee would probably be less expensive.

3. Pre-school registration gives better opportunity for organization of the school and the classes.

4. It is better for the morale of the student body that work be started on the opening night, with definitely organized classes. The system of allotting three evenings to registration, with the attendant practice of permitting students to enter after that time, usually prevents the proper functioning of the class until about the third week.

5. Registration before the opening of the school year would give the students more time in which to procure the necessary supplies.

6. The added formality of pre-school registration would be more impressive to the students. In this connection it might be a good plan to have them sign a statement to the effect that if they subsequently find it necessary or desirable to drop out, at the first opportunity thereafter they will consult with the teacher or some other member of the faculty designated for this purpose. Failure to comply with this simple act of courtesy could be used as a basis for making it somewhat more difficult for individual students to register in succeeding years. Unfortunately many of the evening school students feel no responsibility toward the school or the teachers, as is indicated by the fact that only a small percentage

of them recognize in any way personal communications which the teachers send to them about absence.

7. If it should be found desirable to use simple achievement tests as a basis for the assignment of certain registrants, this could be accomplished more effectively through pre-school registration. It would otherwise be almost impossible to apply any procedure of this type except after the organization of classes. The use of such tests would probably be worthwhile in the formation of some classes, but their general application is not being advocated. When used they too would probably have a tendency to discourage the temporary enthusiast.

Length of School Term

Consistent with its fundamental purpose, the evening school must, for the most part, attempt to render definite service to those who apply. Consequently it is essential that adjustments be made, wherever possible and practicable, to meet the needs, interests and various limitations which affect and motivate the students. For this reason consideration should be given to the length of class period, the hours of starting and stopping each evening, the selection of evenings, and the annual time schedule. On the first two points the usual practice of having two periods of one hour each, from 7:30 to 9:30, seems to be as satisfactory as any other possible arrangement. On the third score the practice is not so uniform, but in Philadelphia at least it has been found that different combinations of evenings mean little to the attendance figures. Thus it is to the last named consideration that attention is directed.

The evidence seems to point to the desirability of shorter and more definitely outlined units of work, and there are many who advocate that these units be of about six weeks duration. The advantages are that the shorter period gives the work more definite direction, brings the goal of achievement closer to the student and reduces the monotony. However, the exact length of time to be employed is a matter of trial and error. Thus it might be well to shorten the terms and resort to the practice found in Philadelphia, of offering an extra spring course in some schools. A schedule of such type could be as follows: a fall term

of ten weeks from the early part of September until Thanksgiving; a winter course of ten weeks from the early part of January until one or more weeks before Easter; and in certain schools a spring term of ten weeks starting after the Easter holidays and continuing until June. Such an arrangement should prove beneficial to many of that large group who are forced to drop out for industrial reasons. Thus, by having no sessions during December some of those who discontinue because of overtime during the Christmas season could continue in school, and the extra length of vacation at this time might induce more of a desire to return in January. It is also possible that the spring term could be arranged to accommodate many who are forced to drop out during the second term. If it is true, as this study seems to show, that distance from the school within reasonable limits does not materially affect attendance, the fact that the spring term would be given only in some schools should not prove much of a handicap in a city system. Incidentally, the experience of Philadelphia with spring courses has been very satisfactory. Normally a student registering in September under the suggested plan, would be expected to complete two of these units, but the third term would offer additional opportunity for the more serious. The adoption of a ten-week period also seems good for the individual who comes to evening school to brush up on something previously studied, or for a short course in some particular type of work.

Courses of Study

There has been an increasing tendency on the part of large cities to set up centrally located evening schools, offering the same type of work that is found in the day high schools, and whose credits are given the same recognition. These schools are designed largely for those who need such credits for entrance into higher institutions, and the conditions which the school must meet to supply this need bring about a rather arduous program. In Central High School of Philadelphia for example, many of the students attend from 6.45 until 10.10 on four evenings each week from September until June, and scholastic requirements are rigidly enforced. Consequently an exceptional type of evening

school student is attracted and extremely worthwhile results are attained. On the whole the establishment of such schools represents the most progressive step that has been taken in the evening school in recent years.

But there are many young people who need definite courses of a different nature; boys in the industrial classes who are interested in certain trades; and commercial girls who are trying to qualify for jobs in that field, or to secure better positions than those already held. Mention has already been made of the success which attends some of the trade classes in Philadelphia, but it appears that there is a need for more of this kind of effort. Thus industrial and trade courses leading to definite ultimate objectives could be organized to cover three or four years, with the necessary supplementary material such as mathematics and English included. It is suggested that these courses be stripped of non-essentials, but the requirements ought to be definitely met before credit is granted. Through the school's contact with employers, and placement service, the student could thus gain a definite vocational advantage by the satisfactory completion of such a course. A program of this type might be worthwhile as a means of influencing a greater percentage of students to attend for more than one year. It has been pointed out in this study that more than half of the registrants in the public evening high school have never attended before, and approximately three-fifths of them have never before completed as much as one year.

It is not recommended that all students be guided into such courses but those who satisfactorily meet the requirements should be rewarded with a diploma or certificate of some significance. One would not expect an award of this type to be of the same standard scholastically as that given by the day high school, but if it is really a symbol of training and ability in a certain field it should gain recognition in the business world.

It is obvious that the offering of the evening school should be as varied as is consistent with the demand and the expenditure necessitated, but in a large city system schools which are relatively close together form a better unit for this purpose than does the individual school. It has been found that students are willing to travel farther for what they really want, and that those

who do so are of more persistent type. Unfortunately however, they are not always aware of what is offered in other schools, which suggests again that it is of advantage to have registration conducted by committees who are more familiar with the general situation.

Homework and Tests

In the portion of the study devoted to this topic the conclusion has already been drawn that homework should be assigned in classes where its use seems to be warranted, but exceptions should be made of those students who do not have time to spend on it. The fundamental function of these home assignments should be to aid the pupil who wants to advance faster than the limited time in school permits.

Tests also should be administered in those classes where the type of work warrants their use, especially for those students who are working for credit. According to this study the pupils themselves recognize the need for testing.

Textbooks

In many fields there is a lack of suitable textbooks for use in the evening school. Books used in the day school are often unsatisfactory for this purpose, and many of the texts which deal with subjects being taken by the night school student presuppose a background which he does not possess. This is particularly true of fields which involve various types of mathematics, in spite of the fact that there are many mathematics texts on the market which are practical in the sense that they include blue prints and shop problems. The real need is for material which is practical in the presentation of fundamentals and principles, and written expressly for those who are to be served.

Consolidation of Classes

There is a certain amount of evidence which indicates that care must be exercised in the consolidation of classes, when this becomes necessary through decrease in numbers. Aside from the respective merits of the teachers involved, the sudden shift

from one teacher to another seems to have a demoralizing effect upon many of the students. It might be too, that there is a certain amount of resentment also involved.

Interviewing of Drop-outs

In the discussion dealing with registration it was suggested that the registrants be asked to sign a statement to the effect that if they subsequently found it necessary or desirable to discontinue, they would, at the first opportunity thereafter, consult with the teacher or some member of the faculty designated for that purpose. These interviews could be made a part of the guidance program, and might be instrumental in reducing elimination. To what extent drop-outs would fulfill this obligation is a matter of conjecture, but if conferences were held with a considerable number of them, valuable information would be secured. More should be known concerning the reasons for elimination, and the interview seems to be the best medium for this purpose; but house to house interviewing is costly, slow, and probably not so satisfactory as when conducted at the school. The added speed of the latter method might be the means of getting a greater percentage of the drop-outs back into class.

Articulation with the Day School

The results at hand indicate that in only a very small percentage of the cases does the day school take the initiative in directing students to the public evening school, although it is evident that there should be a high degree of cooperation between the two institutions. It is suggested that the evening school take the initiative in furnishing an adequate basis for such cooperation.

Necessity for Investigation and Experimentation

At the present time the public evening high school is in need of a great amount of reliable information bearing upon its problems. Facts should form the basis for innovations but only after they have been applied in actual practice on a comparatively small scale; because nowhere else in the educational field is it more difficult to prognosticate the effects of changes. This is

probably due to the variability and potency of the emotional reactions of the students.

In this connection the following topics for investigation and experimentation in the public evening high school are suggested:

What is the place of the public evening high school in the educational scheme, and what are its proper functions?

The program of studies and its improvement in the light of the purposes for which it is organized, and the people for whom it is intended.

Materials of instruction analyzed according to the same criteria.

The use of tests as a basis for assignment to class groups.

Job analysis as a basis for course construction.

Extent of active cooperation which can be secured from employers, and the effects of such assistance.

A similar study involving parents.

An effective program of guidance.

Most effective lengths of units of instruction, viz., number of weeks.

Effects of registration before the opening of the school year.

Registration by committee vs. registration by the entire faculty.

Additional knowledge of reasons for withdrawal.

More information concerning reasons for registration.

Articulation between different levels of evening school work, and between the evening school and the day school.

Greater emphasis upon courses lasting for more than one year, and with some hope of vocational advantage upon completion.

A survey of text books in use in various subjects, and suggestions for improvement.

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